



## **DEPARTMENT OF THE INTERIOR**

### **Fish and Wildlife Service**

#### **50 CFR Part 17**

**[Docket No. FWS–R4–ES–2010–0024]**

**[4500030114]**

**RIN 1018–AW89**

### **Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Dusky Gopher Frog (Previously Mississippi Gopher Frog)**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Final rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service, designate critical habitat for the dusky gopher frog under the Endangered Species Act. In previous publications, we used the common name “Mississippi gopher frog” for this species. We are taking this action

to fulfill our obligations under the Act. Land in St. Tammany Parish, Louisiana, and Forrest, Harrison, Jackson, and Perry Counties, Mississippi, is being designated under a court approved settlement agreement to finalize critical habitat for the species. The effect of this regulation is to conserve the habitat upon which dusky gopher frog depends.

**DATES:** This rule becomes effective on **[INSERT DATE 30 DAYS AFTER DATE OF FEDERAL REGISTER PUBLICATION]**.

**ADDRESSES:** This final rule and the associated final economic analysis are available on the Internet at <http://www.regulations.gov>. Comments and materials received, as well as supporting documentation used in preparing this final rule, are available for public inspection, by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Mississippi Ecological Services Field Office, 6578 Dogwood View Parkway, Jackson, MS 39213; telephone: 601-321-1122; facsimile: 601-965-4340.

**FOR FURTHER INFORMATION CONTACT:** Stephen Ricks, Field Supervisor, U.S. Fish and Wildlife Service, Mississippi Ecological Services Field Office, 6578 Dogwood View Parkway, Jackson, MS 39213; telephone: 601-321-1122; facsimile: 601-965-4340. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800-877-8339.

**SUPPLEMENTARY INFORMATION:**

## **Executive Summary**

**Why we need to publish a rule.** Under the Endangered Species Act, we are required to designate critical habitat for any endangered or threatened species if prudent and determinable and we must issue a rule to designate critical habitat. Designation of critical habitat for the dusky gopher frog was found to be prudent and a proposed rule to designate critical habitat was published on June 3, 2010. We subsequently repropose critical habitat on September 27, 2011, and announced the availability of an economic analysis. Pursuant to a court-approved settlement agreement, we must deliver to the **Federal Register** our final designation of critical habitat for the dusky gopher frog on or before May 30, 2012. This action fulfills our obligations under the Act and the settlement agreement.

### **This rule designates critical habitat for the dusky gopher frog.**

- Approximately 625 hectares (1,544 acres) are designated as critical habitat in St. Tammany Parish, Louisiana.
- Approximately 1,996 hectares (4,933 acres) are designated as critical habitat in Forrest, Harrison, Jackson, and Perry Counties, Mississippi.
- In total, approximately 2,621 hectares (ha) (6,477 acres (ac)) are designated as critical habitat for the dusky gopher frog.

**Peer reviewers support our methods.** We solicited expert opinions from seven knowledgeable individuals with scientific expertise that included familiarity with the species, the geographic region in which the species occurs, and conservation biology

principles. We received responses from six of the peer reviewers. The peer reviewers generally concurred with our methods and conclusions, and provided additional information, clarifications, and suggestions to improve the final critical habitat rule.

## **Background**

It is our intent to discuss in this final rule only those topics directly relevant to the development and designation of critical habitat for the dusky gopher frog under the Endangered Species Act of 1973, as amended (Act; 16 U.S.C. 1531 *et seq.*). For more information on the biology and ecology of the dusky gopher frog, refer to the final listing rule published in the **Federal Register** on December 4, 2001 (66 FR 62993). For additional information on dusky gopher frog critical habitat, refer to the revised proposed rule to designate critical habitat for the dusky gopher frog published in the **Federal Register** on September 27, 2011 (76 FR 59774) and the announcement of the public hearing for the revised proposed rule published in the **Federal Register** on January 17, 2012 (77 FR 2254).

## **Taxonomy and Nomenclature**

Subsequent to the listing of the dusky gopher frog (=Mississippi gopher frog), taxonomic research was completed that indicated that the entity (which we listed as a DPS of the dusky gopher frog (*Rana capito* [sic] *sevosa*)) is different from other gopher frogs and warrants acceptance as its own species (Young and Crother 2001, pp. 382–

388). The herpetological scientific community accepted this taxonomic change and the scientific name for the species was changed to *Rana sevosa*. In addition, all comments on taxonomy that we received during the comment periods for the revised critical habitat proposal were in agreement that the frog warrants acceptance as its own species.

Therefore, listing as a DPS is no longer appropriate. The taxonomic change meant that a change in the common name from Mississippi gopher frog to dusky gopher frog was appropriate (Crother *et al.* 2003, p. 197). Most comments we received on this subject indicated that we should change the common name to dusky gopher frog from Mississippi gopher frog. Therefore, although in the revised proposed critical habitat rule (76 FR 59774) we stated that we would continue to use the common name “Mississippi gopher frog” we now believe the common name dusky gopher frog should be used to describe the listed species rather than Mississippi gopher frog and, in this rule, we use the common name “dusky gopher frog” for this species.

We received other comments on changes that have been proposed in the scientific literature regarding removing the genus name *Rana* from a group of North American frogs and replacing it with the genus *Lithobates* (see Crother 2008, p. 7). There is still reluctance by some in the scientific community to accept this change (Hillis 2007, p. 331; Pauly *et al.* 2009, p. 115; Wiens *et al.* 2009, p. 1220). Until there is a clear consensus within the scientific community, we will continue to use the scientific name of *Rana sevosa* for the dusky gopher frog.

#### *Previous Federal Actions*

The dusky gopher frog was listed as an endangered species under the Act on December 4, 2001 (66 FR 62993). The species was at that time identified as the Mississippi gopher frog, *Rana capito sevosa*, a distinct population segment of the dusky gopher frog (*Rana capito*) (see Taxonomy and Nomenclature discussion above). At the time of listing, the Service found that designation of critical habitat was prudent. However, the development of a designation was deferred due to budgetary and workload constraints.

On November 27, 2007, the Center for Biological Diversity and Friends of Mississippi Public Lands (plaintiffs) filed a lawsuit against the Service and the Secretary of the Interior for our failure to timely designate critical habitat for the dusky gopher frog (*Friends of Mississippi Public Lands and Center for Biological Diversity v. Kempthorne* (07-CV-02073)). In a court-approved settlement, the Service agreed to submit to the **Federal Register** a new prudency determination, and if the designation was found to be prudent, a proposed designation of critical habitat by May 30, 2010, and a final designation by May 30, 2011. Designation of critical habitat for the dusky gopher frog was again found to be prudent, and a proposed rule to designate critical habitat for the dusky gopher frog was published on June 3, 2010 (75 FR 31387).

During the comment period for the June 3, 2010, proposed rule, the peer reviewers and other commenters indicated their belief that the amount of critical habitat proposed was insufficient for the conservation of the dusky gopher frog and that additional habitat should be considered throughout the historic range of the species.

Specifically, information was provided that pointed to limitations in the data we used to determine the size of individual critical habitat units and that there was additional habitat in Louisiana that would aid in the conservation of dusky gopher frogs. Based on this new information, we asked the plaintiffs to agree to an extension of the deadline that was established by the original settlement. Plaintiffs agreed, and in a modification to the original settlement signed on May 4, 2011, the court agreed to the Service's timeline to send a revised proposed critical habitat rule to the **Federal Register** by September 15, 2011, and a final critical habitat rule to the **Federal Register** by May 30, 2012. A revised proposed critical habitat rule was published in the **Federal Register** on September 27, 2011 (76 FR 59774) and replaced our June 3, 2010 (75 FR 31387), proposed critical habitat rule in its entirety.

### **Summary of Comments and Recommendations**

We requested written comments from the public on the revised proposed designation of critical habitat for the dusky gopher frog during two comment periods. The first comment period, associated with the publication of the revised proposed rule and notification of the availability of the associated draft economic analysis (76 FR 59774), opened on September 27, 2011 and closed on November 28, 2011. The second comment period, associated with a public hearing held on January 31, 2012, in Gulfport, Mississippi, opened on January 17, 2012 and closed on March 2, 2012. We also contacted appropriate Federal, State, and local agencies; scientific organizations; and other interested parties, and invited them to comment on the revised proposed rule and

draft economic analysis during these comment periods.

During the first comment period, we received 46 comment letters directly addressing the revised critical habitat designation or the draft economic analysis. During the second comment period, we received 57 comment letters directly addressing the revised proposed critical habitat designation or the draft economic analysis. During the January 31, 2012, public hearing, 19 individuals or organizations made comments on the proposed designation. All substantive information provided during comment periods has either been incorporated directly into this final determination or is addressed in our responses below. Public comments we received were grouped into six general categories.

#### *Peer Review*

In accordance with our peer review policy published in the **Federal Register** on July 1, 1994 (59 FR 34270), we solicited expert opinions from seven knowledgeable individuals with scientific expertise that included familiarity with the species, the geographic region in which the species occurs, and conservation biology principles. We received responses from six of the peer reviewers.

We reviewed all comments we received from the peer reviewers for substantive issues and new information regarding critical habitat for the dusky gopher frog. The peer reviewers generally concurred with our methods and conclusions, and provided additional information, clarifications, and suggestions to improve the final critical habitat



rule. Peer reviewer comments are addressed in the following summary and incorporated into the final rule as appropriate.

#### *Peer Reviewer Comments*

*Comment 1:* All peer reviewers agreed that although *Rana capito sevosa* was listed as a distinct population segment of *Rana capito*, the listed entity has now been accepted by the scientific community as a unique species, *Rana sevosa*. All but one of the peer reviewers agreed with our proposed change of the common name of the listed entity from Mississippi gopher frog to dusky gopher frog. Two of the peer reviewers suggested changing the scientific name of *Rana sevosa* to *Lithobates sevosus* based on recent publications in the scientific literature. However, one of these peer reviewers stated that although the four major herpetological societies require authors submitting papers to their publications to use the standard English names of Crother (2008, p. 8) [=dusky gopher frog], authors may use their discretion on the scientific name used (within scientific reason and with citation when needed).

*Our Response:* See “Taxonomy and Nomenclature” above. The Service is changing the name of the listed entity to *Rana sevosa*, the dusky gopher frog. However, because disagreement exists in the scientific community regarding the taxonomic support for replacing *Rana* with *Lithobates*, the Service believes it is not yet appropriate to make this change for the listed entity.

*Comment 2:* All of the peer reviewers agreed that it was appropriate that the Service had increased the size of the critical habitat units in the September 27, 2011 revised proposed rule. Nevertheless, there was some disagreement among the peer reviewers about whether the increase was adequate for the conservation of the dusky gopher frog, and this was reflected in their comments regarding the methods used to define the individual units. All of the peer reviewers approved of combining the maximum distance movements of the two species of gopher frogs for use in the determination of the size of individual critical habitat units; however, two of the peer reviewers, and others, provided specific comments on our use of these data. The comments included: combining movement data from studies of the same population; deleting anecdotal observations from single frogs not incorporated into larger studies; using the mean rather than the median to calculate the value used to define the area around each breeding pond; and increasing the area of critical habitat beyond the value calculated from the movement data to account for areas of poor upland habitat quality. One peer reviewer stressed the need to maximize the size of critical habitat units due to the uncertainty of habitat suitability when creating circular areas of protection and due to the reduction in dusky gopher frog genetic variability resulting from the species' habitat isolation and small population size.

*Our Response:* In our January 17, 2012, publication (77 FR 2254), we reopened the comment period and announced a public hearing on the revised proposed critical habitat designation. We also proposed changes in the data analysis that had been used in creating the critical habitat units in the revised proposed rule, and requested comments on these changes. The changes included combining movement data from individual sites

and removing one anecdotal gopher frog movement record from our maximum distance dataset. The Service did not receive any comments on these changes from peer reviewers or the public. We continue to believe, as was expressed by one of the peer reviewers, that the use of the median distance value in our calculations is more appropriate than using the mean. The use of the mean would yield a higher value because the maximum distance values are skewed toward larger values and the mean is more influenced by these values when compared to the median. To illustrate the possible bias in using the mean rather than the median, one reviewer pointed out that the greatest maximum distance movement was on a site where burrow habitat in the uplands was severely limited and the frogs had to move long distances to find appropriate fossorial (underground) habitat. We believe the use of the median long distance movement value provides a better estimate of central tendency in our dataset, and we consider its use more appropriate than the mean. The Service agrees that there are likely differences in habitat suitability in the various critical habitat units, and we have tried to account for that by using the median maximum distance value, plus a buffer, in calculating the area to include in critical habitat surrounding each occupied or unoccupied breeding pond (see “*Criteria Used To Identify Critical Habitat*” below).

#### *Comments from States*

Section 4(i) of the Act states, “the Secretary shall submit to the State agency a written justification for his failure to adopt regulations consistent with the agency’s comments or petition.” The only comment received from a State agency was from an

employee of a State agency that was a peer reviewer of the revised proposed rule. This comment was in support of the revised proposal as written.

### *Public Comments*

#### General Comments Issue 1: Critical Habitat Delineation Methodology

*Comment 3:* If the delineation of critical habitat for the dusky gopher frog is based on the best available science, there is no biological reason to include movement data from other gopher frogs (*Rana capito*) and not include movement data from crawfish frogs (*R. areolata*). The two gopher frog species and crawfish frogs share derived morphological and behavioral characters that separate them from all other frog species. One of their shared behavioral traits is an affinity for small terrestrial cavities.

*Our Response:* The two species of gopher frogs (*Rana capito* and *R. sevosia*) share similar habitat within different geographic areas of the longleaf pine ecosystem in the southeastern United States. As adults, all gopher frogs occupy below-ground habitat within the forested uplands, typically stump holes, small mammal burrows, and when they are available, gopher tortoise burrows. Crawfish frogs occur outside the range of gopher frogs and are distributed to the east and west of the Mississippi River in an arc from the eastern Gulf Coast of Texas north to southern Iowa, Illinois, Indiana, and Kentucky, and south across western Tennessee, north and central Mississippi, and northeastern Louisiana (Parris and Redmer 2005, p. 526). Crawfish frogs occupy a wide variety of habitats including open wet woodlands, wooded valleys, prairies, river

floodplains, pine forest, wet pastures, and grasslands (Parris and Redmer 2005, p. 527). Adult crawfish frogs use fossorial habitats, commonly occupying abandoned crayfish burrows (Parris and Redmer 2005, p. 527). Although adult dusky gopher frogs also use fossorial habitats (abandoned mammal burrows, stump holes), the Service considers the differences in geography and habitat between the two species to be too great to include crawfish frog movement data in our critical habitat calculations.

*Comment 4:* The amount of area designated as critical habitat around occupied or unoccupied dusky gopher frog breeding ponds should be increased. One commenter requested a general increase in area only around the four occupied sites. Another commenter wanted the Service to go back to using a 650-m (2,133-ft) radius around all sites as was used to construct critical habitat units in our September 27, 2011, revised proposed rule (76 FR 59774). In addition, that commenter requested the radius be increased to 1,000 m (3,281 ft) around Glen's Pond when constructing the critical habitat unit at that site.

*Our Response:* see Section “*Criteria Used To Identify Critical Habitat*” below for a discussion of our rationale for constructing individual critical habitat units. The Service used the best available scientific information on gopher frog movements to quantify the areas we are designating as critical habitat. We have found no scientific justification for using a larger radius when constructing some units over others. In the future, if such data become available, under the authority of section 4(a)(3)(A)(ii) the Secretary could revise the designation, as appropriate.

## General Comments Issue 2: Procedural and Legal Issues

*Comment 5:* The Endangered Species Act and the proposed designation of critical habitat are unconstitutional and the Service lacks authority to regulate the dusky gopher frog under the Commerce Clause of Article I, Section 8, Clause 3 of the United States Constitution. The U.S. Supreme Court defined the limits of the Commerce Clause by mandating that (i) Congress may only regulate an activity that “substantially affect(s)” interstate commerce, and (ii) there must be a rational basis for Congress’ conclusion that the regulated activity sufficiently affects interstate commerce. The Service did not cite any link whatsoever between the designation of critical habitat for the frog and commerce, be it travel, tourism, scientific research, or agriculture. Designation of critical habitat will “result in a significant impingement of the States’ traditional and primary power over land and water use” and this effective control is not justified because there is no Federal interest in regulation of interstate commerce relative to the dusky gopher frog.

*Our Response:* The constitutionality of the Act in authorizing the Services’ protection of endangered and threatened species has consistently been upheld by the courts. see, e.g., *GDF Realty Investments, Ltd. v. Norton*, 326 F.3d 622 (5<sup>th</sup> Cir. 2003); *Gibbs v. Babbitt*, 214 F.3d 483 (4<sup>th</sup> Cir. 2000); *National Association of Homebuilders v. Babbitt*, 130 F.3d 1041 (D.C. Cir. 1997), *cert. denied*, 524 U.S. 937 (1998); *Rancho Viejo v. Norton*, 323 F.3d 1062 (D.C. Cir. 2003); and *United States v. Hill*, 896 F. Supp. 1057 (D. Colo. 1995). The courts have held that regulation under the Act to protect species that live only in one State is within Congress’ Commerce Clause power and that loss of animal diversity has a substantial effect on interstate commerce. *National Ass’n of Home*

*Builders*, 130 F.3d at 1050-51; see *Rancho Viejo*, 323 F.3d at 310, n. 5. Thus, although the dusky gopher frog is currently known to occur only within the State of Mississippi, the Service’s application of the Act to designate critical habitat for this species is constitutional.

*Comment 6:* Designation of private property as critical habitat constitutes a “taking” of private property under the 5<sup>th</sup> Amendment of the U.S. Constitution by depriving landowners of the economically beneficial use of their land. As a result of the designation, the property will be pressed into “public service” without compensation to the landowners.

*Our Response:* The Service analyzed the potential takings implications of designating critical habitat for the dusky gopher frog and included this analysis in our administrative record. Determining whether a constitutional taking will occur is a matter for the courts. However the process is generally fact-specific and involves weighing the character of the government action, the economic impact of that action, and the reasonableness of the property owner’s investment-backed expectations. We have identified two “taking” scenarios that are relevant to the designation of critical habitat. The first is a physical taking when the government’s action amounts to a physical occupation or invasion of the property, including the functional equivalent of a practical ouster of the owner’s possession. The proposed designation of critical habitat for the dusky gopher frog would not result in physical occupation or invasion of private property. On non-Federal lands, activities that lack Federal involvement, such as timber management and oil and gas extraction, would not be affected by the critical habitat

designation. However, a second scenario concerns activities of an economic nature that are likely to occur on non-Federal lands in the area encompassed by this designation, and where Federal involvement may occur, and includes construction of utilities, residential or commercial development, and road construction and maintenance. This second scenario is where a regulation may potentially deny all economically beneficial or productive use of land, commonly referred to as a categorical taking. However, the mere promulgation of a regulation designating critical habitat does not on its face deny property owners all economically viable use of their land. The Act does not automatically restrict all uses of lands that have been designated as critical habitat, but only imposes restrictions under section 7(a)(2) on Federal agency actions that may result in destruction or adverse modification of critical habitat. Furthermore, as discussed above, if a biological opinion concludes that a proposed action is likely to result in the destruction or adverse modification of critical habitat, we are required to suggest reasonable and prudent alternatives to the action that would avoid the destruction or adverse modification of critical habitat. Such alternatives must be economically, as well as technologically, feasible (50 CFR 402.02).

*Comment 7:* The Service has no delegated authority to regulate or confiscate private land.

*Our Response:* When prudent, the Service is required to designate critical habitat under the Act. The Act does not authorize the Service to regulate private actions on private lands or confiscate private property as a result of critical habitat designation (see further explanation under Comment 6 above).

*Comment 8:* The Service did not comply with the National Environmental Policy



Act (NEPA) (42 U.S.C. 4321 *et seq.*). The Ninth Circuit's holding that NEPA does not apply to critical habitat designations rested in part on supposition that the action at issue does not alter the natural, untouched physical environment at all. Therefore, as maintenance of critical habitat requires special management, which can be interpreted as human interference with the environment, a NEPA review is required.

*Our Response:* Environmental assessments and environmental impact statements, as defined under NEPA, are not required for regulations enacted under section 4 of the Act (see 48 FR 49244, October 25, 1983). The Service has determined that, outside of the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, a NEPA analysis is not required for critical habitat designation.

The fact that a physical or biological feature requires special management considerations or protection to meet the definition of "critical habitat" does not mean that the designation of critical habitat would include "special management" requiring active maintenance or any other form of human interference with property. In the case of unoccupied habitat, the "physical/biological features/special management" part of the definition simply does not apply. Thus, the designation of critical habitat does not constitute the sort of human interference that would require a NEPA analysis.

*Comment 9:* In order to determine what is "essential to the conservation of the species," the Service must first identify "the point" when the species will no longer be "endangered" or "threatened". That point can be identified only if the Service has determined a viable population size and the minimum habitat necessary to sustain that population. These threshold determinations are missing from the proposed rule. The failure to articulate a basis for designating each unit as critical habitat is a violation of the

law that must be corrected.

*Our Response:* During the process of developing a recovery plan, as required by Section 4(f) of the Act, the Service determines the threshold that must be met to establish when a species is no longer “endangered” or “threatened”. The Service has not yet completed a recovery plan for the dusky gopher frog, and thus, this threshold has not been defined. However, the Act does not require that recovery criteria be established as a precondition to designating critical habitat. Section 3(5)(A) of the Act defines the term “critical habitat” as (i) the specific areas within the geographical area occupied by the species, at the time it is listed... on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed... upon a determination that such areas are essential for the conservation of the species. The Act does not provide additional guidance on how to determine what habitat is essential for the conservation of the species, nor does it require a minimum population and habitat viability analysis for critical habitat designation. In this case, the Secretary has discretion in determining what is essential for the conservation of a species. The Service has studied the one dusky gopher frog population known at the time of listing to determine the habitat attributes essential to the conservation of the species, and determined that the primary constituent elements (PCEs) specific to the dusky gopher frog are: (1) Ephemeral wetland habitat (PCE 1); (2) upland forested nonbreeding habitat (PCE 2); and (3) upland connectivity habitat (PCE 3) (see “*Criteria Used To Identify Critical Habitat*” below). With regard to units/subunits not known to be occupied at the time of listing, we have determined that

these areas are essential to the conservation of the dusky gopher frog because this species is at high risk of extirpation from stochastic events, such as disease or drought, and from demographic factors such as inbreeding depression. The establishment of additional populations beyond the single site known to be occupied at listing is critical to protect the species from extinction and provide for the species' eventual recovery.

Therefore, the Service believes that all the areas designated as critical habitat meet the definition under section 3(5)(A) of the Act. If the Service gains knowledge of additional areas that meet the definition of critical habitat, then under section 4(a)(3)(A)(ii) of the Act, the Secretary may revise the designation, as appropriate. The Service has articulated a basis for designating each unit as critical habitat under the individual unit descriptions in **Final Critical Habitat Designation**.

*Comment 10:* The Service has failed to meet the “prudent and determinable” standard of section 4(a)(3) of the Act. In fact, the Service was required to immediately “find” critical habitat for the dusky gopher frog as a result of a court settlement with the Center for Biological Diversity.

*Our Response:* see “*Previous Federal Actions*.” The dusky gopher frog was listed as an endangered species under the Act on December 4, 2001 (66 FR 62993), and at that time the Service found that designation of critical habitat was prudent. On November 27, 2007, the Center for Biological Diversity and Friends of Mississippi Public Lands (plaintiffs) filed a lawsuit against the Service and the Secretary of the Interior for our failure to timely designate critical habitat for the dusky gopher frog. In a court-approved settlement, the Service agreed to submit to the **Federal Register** a new

prudence determination, and if the designation was found to be prudent, a proposed designation of critical habitat by May 30, 2010, and a final designation by May 30, 2011. A new prudence determination was included in our proposed rule to designate critical habitat for the dusky gopher frog published on June 3, 2010 (75 FR 31387). Based on new scientific information we received during the comment period for this proposed rule, the Service requested and received a modification to the settlement agreement, signed on May 4, 2011. The Service complied with the settlement agreement and made another prudence determination in our revised proposed rule to designate critical habitat for the dusky gopher frog (76 FR 59774, September 27, 2011) which replaced the 2010 proposed rule in its entirety. Thus, the settlement agreement did not force the Service to “find” critical habitat for the dusky gopher frog, but rather complete a new prudence determination and only proceed with a proposed, and ultimately, a final designation of critical habitat if deemed prudent.

*Comment 11:* The Service did not contact all landowners potentially affected by the proposed designation of critical habitat.

*Our Response:* The Act requires that we publish the proposed regulation in the Federal Register, give actual notice of the proposed regulation to each affected state and county (i.e., those in which the species is believed to occur), appropriate professional organizations, and publish a summary of the proposed regulation in a newspaper of general circulation in each area of the U.S. where the species is believed to occur. It also requires that we promptly hold one public hearing if any person files a request within 45 days of the publication (in the Federal Register). When we were able to identify the landowners of a proposed critical habitat unit, we contacted them directly. In addition,

we attempted to ensure that as many people as possible would be aware of the revised proposed critical habitat designation, draft economic analysis, and public hearing by issuing press releases to all major media in the affected area, submitting newspaper notices for publication within areas of revised proposed critical habitat, and directly notifying affected State and Federal agencies, environmental groups, State Governors, Federal and State elected officials, and county commissions. We accepted comments from September 27, 2011, through November 28, 2011, and from January 17, 2012, through March 2, 2012, for a total of 105 days. We sent out notifications of the second comment period to commenters from the first comment period when they had supplied their contact information. By these actions, we have complied with or exceeded all of the notification requirements of the Act and the Administrative Procedure Act (5 U.S.C. subchapter II).

*Comment 12:* One commenter expressed opposition to Federal acquisition of 16<sup>th</sup> Section land unless the land is purchased at full replacement value or fair market lease without loss and hardship to schools and without increasing local homeowners' tax burden to recoup the losses from such a transaction.

*Our Response:* Designation of critical habitat on land does not constitute "Federal acquisition" of that land. The Service has no plans to acquire ownership of any land designated as critical habitat. The commenter referred to "16<sup>th</sup> section" lands. This designation is based on the original surveys of the country in the late 1700's when land was systematically surveyed into square townships, 9.656 km (6 miles) on a side. The townships were subdivided into 36 sections of 2.59 km<sup>2</sup> (1 mi<sup>2</sup>). Section 16 in each township was reserved for the maintenance of public schools. This system remains in

place in Mississippi and funds derived from “16<sup>th</sup> section” lands are used to support county funding for public schools. Our intention is to work with existing landowners, including the State of Mississippi, which owns 16<sup>th</sup> Section lands, to further the recovery of the dusky gopher frog.

*Comment 13:* Critical habitat designation may limit conservation actions in other areas.

*Our Response:* The Service will work on actions to support the recovery of the dusky gopher frog wherever possible, including outside the geographic area designated as critical habitat.

#### General Comments Issue 3: Critical Habitat Designation on Private Land-General

*Comment 14:* Critical habitat designation on private land will prevent future timber management and development within the designated area. Property owners within one mile of critical habitat could be affected by the designation. Private property owners will be burdened with consultation under section 7 of the Act as a result of the critical habitat designation. The Service should restrict critical habitat on private land to landowners that voluntarily participate in the recovery of endangered and threatened species.

*Our Response:* The selection of sites to be included in critical habitat is based, first and foremost, on the needs of the species. Before we determine land ownership, we consider what is needed for species conservation based on the best available scientific and commercial information. This ensures that the best locations to support species’

conservation are identified and increases awareness among all potential partners of the best known sites to support the conservation of the species.

The designation of critical habitat does not impose a legally binding duty on private parties. Activities that do not involve a Federal agency, Federal action, Federal funding, or Federal permitting, will be unaffected by the designation of critical habitat. Private land use activities, such as farming and silviculture, would be unaffected. Federal activities, or actions permitted, licensed, or funded by Federal agencies, will require consultation with the Service if they are likely to adversely modify critical habitat. Consultation is a process by which Federal agencies use the Service's expertise to evaluate the potential effects of a proposed action on species listed under the Act and their critical habitats. The Service works with Federal agencies to identify alternatives where activities or projects may proceed without adverse modification to critical habitat. For example, if private landowners wish to develop their property and are required by the U.S. Army Corps of Engineers (Corps) to obtain a wetlands dredge and fill permit, this would trigger consultation under section 7 of the Act between the Corps and the Service if critical habitat is designated on the property; however, the Service would work with the Corps to identify strategies to avoid adverse modification of critical habitat. Based on our experience with section 7 consultations for other listed species, virtually all projects—including those that, in their initial proposed form, would result in jeopardy or adverse modification—can be implemented successfully with, at most, the adoption of reasonable and prudent alternatives. Reasonable and prudent alternatives must, by definition, be economically feasible and within the scope of authority of the Federal agency involved in consultation.

If there is no activity on private property involving a Federal agency, Federal action, Federal funding, or Federal permitting, participation in the recovery of endangered and threatened species is voluntary. Critical habitat designation does not require property owners to undertake affirmative actions to promote the recovery of the listed species. There is no effect to landowners whose property is outside the specific area designated as critical habitat, no matter the ownership (see response to Comment 6).

#### General Comments Issue 4: Critical Habitat Designation on Private Land—Louisiana

*Comment 15:* The dusky gopher frog has not been seen in Louisiana since 1965, and the habitat designated as Critical Habitat Unit 1 (Unit 1) has none of the primary constituent elements (PCEs) described in the revised proposed rule; the ponds in Unit 1, in their present condition, do not constitute suitable dusky gopher frog habitat under the definition of PCE 1. Although the Service's interest in Unit 1 is caused in part by the perceived difficulty in establishing ephemeral ponds for the dusky gopher frog, artificial ponding has supported gopher frog reproduction. Unit 1 will never have PCEs due to ongoing timber management of the site, which precludes burning or planting longleaf pine trees to improve the upland habitat for the gopher frog. The dusky gopher frog will never be present on site because the landowners object to moving them there. The Service cannot designate critical habitat on the grounds that the PCEs will be present in the future.

*Our Response:* The site in Louisiana identified as Unit 1 contains at least two historic breeding sites for the dusky gopher frog. Unit 1 is not currently occupied nor



was it occupied at the time the dusky gopher frog was listed. For such areas, which are outside the geographical area occupied by a species at the time it is listed, section 3(5)(A)(ii) of the Act requires simply that critical habitat be designated based on a determination that such areas are essential for the conservation of the species. Due to the importance of ephemeral ponds to the recovery of the dusky gopher frog (see “*Criteria Used To Identify Critical Habitat*”), the Service determined that the area of Unit 1 is essential for the conservation of the dusky gopher frog. The only pond occupied at the time of listing is being designated and we determined that this one location is not sufficient to conserve the species. Additional areas that were not known to be occupied at the time of listing are essential for the conservation of the species. Although the presence of the PCEs is not a necessary element for this determination, the Service believes Unit 1 contains the PCE described as Primary Constituent Element 1—Ephemeral wetland habitat (see Section “*Primary Constituent Elements for the Dusky Gopher Frog*”) based on the best available data, which include the visits made to the site by Service personnel and other gopher frog experts. During these visits, the Service assessed the habitat quality of ephemeral wetlands in this area and found that a series of five ponds contained the habitat requirements for PCE 1 (see response to Comment 16 below).

The Service is aware borrow pits and other sites constructed by man have been used for breeding by other species of gopher frogs outside the range of the dusky gopher frog. Nevertheless, these sites need to contain the same features that are present in natural ponds in order for them to provide the proper environment for successful development of metamorphic dusky gopher frogs. Ephemeral, isolated ponds are very

difficult to establish in the landscape due to their short and specific hydrology. The ponds have to hold water long enough to allow for tadpole development and metamorphosis, but if they hold water too long they become permanent ponds and no longer have value for ephemeral pond-breeding amphibians. The U.S. Forest Service, in cooperation with the Service and our partners, constructed a pond on the DeSoto National Forest with the goal of creating a dusky gopher frog breeding site. It has taken 10 years to reach the point where we consider this pond ready to be used as a reintroduction site, and its value as a breeding site has not yet been proven. It is highly unlikely that five ponds, similar to those that currently exist in Unit 1, could be created in the landscape within a timeframe that would provide near-term conservation benefits to the dusky gopher frog.

During the process of delineating critical habitat, the Service assesses habitat to determine if it is essential for the conservation of a listed species. Although we have no existing agreements with the private landowners of Unit 1 to manage this site to improve habitat for the dusky gopher frog, or to move the species there, we hope to work with the landowners to develop a strategy that will allow them to achieve their objectives for the property and protect the isolated, ephemeral ponds that exist there. According to the landowners, the timber lease on their property does not expire until 2043. The Service has a number of tools, such as habitat conservation plans, that could be used to formalize the timber management goals of the landowners and work towards recovery of the dusky gopher frog. There are also programs, such as the Healthy Forests Initiative administered through the U.S. Department of Agriculture's Natural Resources Conservation Service, that provide funding to private landowners for habitat management. However, these tools

and programs are voluntary, and actions such as habitat management through prescribed burning, or frog translocations to the site, cannot be implemented without the cooperation and permission of the landowner.

*Comment 16:* The Service has not provided sufficient support for the argument that Unit 1 is “essential for the conservation” of the dusky gopher frog, only a “more is better” statement that Unit 1 provides additional habitat for population expansion. “Essential for conservation of the species,” the standard for designating critical habitat on unoccupied sites, is a more exacting standard than that for determining critical habitat designation of occupied habitat. The Act requires a demonstration that the designation of unoccupied habitat is essential for conservation, not essential to decreasing the risk of extinction of the species. The Service must provide a factual basis supporting the conclusion that Unit 1 is essential to recovery of the dusky gopher frog.

*Our Response:* The scientific peer reviewers that responded to our original proposed critical habitat rule were united in their assessment that this proposal was inadequate for the conservation of the dusky gopher frog and that we should look within the species’ historic range outside the state of Mississippi for additional habitat for the designation. As a result of the peer review, we conducted a reanalysis of current and historic data for the species, including data from Alabama and Louisiana, to determine if we could find additional habitat that would meet the definition of critical habitat (see Comment 17, below, for discussion of habitat in Alabama). As a result of the rarity of open-canopied, isolated, ephemeral ponds within the historic range of the dusky gopher frog, and their importance to survival of the species, identifying more of these ponds was

the primary focus of our reanalysis (see “*Criteria Used To Identify Critical Habitat*”, below).

The Service visited the area designated as Unit 1 in St. Tammany Parish, Louisiana, in 2011. We conducted a habitat assessment in this specific area because at least two historic breeding ponds for the dusky gopher frog occur there, including the one where the species was last seen in 1965. We determined that five isolated, ephemeral wetlands in that area are similar to ponds where dusky gopher frogs currently breed in Mississippi. The five ponds are in close proximity to each other, which provides metapopulation structure and increases the unit’s value to the long-term survival and recovery of the frogs over an area with a single breeding pond (see “Space for Individual and Population Growth and for Normal Behavior”, below).

The role of critical habitat is to support the life-history needs of the species and provide for conservation. Conservation is defined in section 3(3) of the Act as the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary (recovery). Recovery of the dusky gopher frog will not be possible without the establishment of additional breeding populations of the species. Isolated, ephemeral ponds that can be used as the focal point for establishing these populations are rare, and this is a limiting factor in dusky gopher frog recovery. Based on the best scientific information available to the Service, the five ponds in Unit 1 provide breeding habitat that in its totality is not known to be present elsewhere within the historic range of the dusky gopher frog.

The isolated populations of the dusky gopher frog face many threats, including

droughts and disease. These environmental and biological threats are likely to occur at the same time at sites near each other. Habitat in Louisiana is distant from the extant populations of the dusky gopher frog. For this reason, the Louisiana site would likely be affected by different environmental variables than sites in Mississippi. Thus, Unit 1 provides a refuge for the frog should the other sites be negatively affected by environmental threats or catastrophic events. An example of one of these threats is climate change. Climate change will undoubtedly affect amphibians throughout the world in the coming decades (Lawler *et al.* 2010, p. 38). For species such as the dusky gopher frog, one of the greatest threats posed by climate change is water availability. The amount and timing of precipitation can have dramatic effects on ephemeral breeding ponds, resulting in mortality of eggs and larvae. In addition, post-metamorphic survivorship may be reduced by increased desiccation risk. Dusky gopher frogs will be susceptible to the effects of rapid climate change due to their limited natural ability to move through the landscape, and habitat fragmentation. Hydrological changes to ponds at the currently occupied sites could mean extinction for this species. The designation of critical habitat, and the creation of new populations of dusky gopher frogs through reintroductions, should give the species better odds of survival and recovery given the threats posed by climate change.

In summary, the Service believes Unit 1 is essential to the conservation of the dusky gopher frog because it provides: (1) Breeding habitat for the dusky gopher frog in a landscape where the rarity of that habitat is a primary threat to the species; (2) a framework of breeding ponds that supports metapopulation structure important to the long-term survival of the dusky gopher frog; and (3) geographic distance from extant

dusky gopher frog populations, which likely provides protection from environmental stochasticity.

*Comment 17:* The site in Louisiana (Unit 1) was chosen without regard to available habitat for the dusky gopher frog in Alabama. Alabama contains habitat that provides more of the PCEs needed for the dusky gopher frog to survive than in Unit 1, and the Service provided no assertion that Alabama ponds are not essential for the conservation of the dusky gopher frog. The standard the Service applied to designating critical habitat areas was that they would provide “additional habitat” and this standard could just as easily be applied to Alabama as to Louisiana. Nevertheless, critical habitat may only include areas “essential to the conservation of the species.” The Service’s failure to apply a consistent or correct standard for determining critical habitat is arbitrary and prohibited by the Administrative Procedure Act.

*Our Response:* Peer reviewers of our original proposed rule indicated that critical habitat for the dusky gopher frog in the proposal (76 FR 59774, September 27, 2011) was inadequate for the conservation of the dusky gopher frog. Thus, the Service conducted a habitat reassessment, which included areas outside of Mississippi that are within the species’ historic range in Louisiana and Alabama (see Comment 16 and “*Criteria Used To Identify Critical Habitat*”, below). In Alabama, the only record for the dusky gopher frog, as currently described, is from 1922 at a location in Mobile County near Mobile Bay. The upland terrestrial habitat at this site has been destroyed and replaced by a residential development (Bailey 1994, p. 5). A breeding site that might have been used by these frogs has never been found. Two remote sensing studies (Hart 2004, pp. 1-9; Bailey 2009, pp. 1-14) have been conducted to search for ponds and terrestrial habitat

that might support dusky gopher frog populations. Those ponds identified using aerial photography which were visited did not contain habitat that provides a conservation benefit for dusky gopher frogs. Habitat was poor because of a number of factors which limited its suitability for dusky gopher frogs. For example, ponds contained woody shrubs and trees, were occupied by fish, occurred within agricultural fields, and/or were surrounded by trailers and houses (Hart 2004, pp. 8-9). As there are no data supporting the occurrence of historic or current dusky gopher frog breeding sites in Alabama, nor any habitat of a quality certain to support conservation of the frog, the Service could not identify areas in Alabama that we believed essential for the conservation of the species in Alabama (see “*Criteria Used To Identify Critical Habitat*”, below). The Service does not have data, nor did any commenter provide data, to support the assertion that habitat in Alabama provides more of the PCEs needed for the dusky gopher frog to survive than in Unit 1.

*Comment 18:* Unit 1 is not “essential” to the survival of the frog because most of the proposed critical habitat occurs on the DeSoto National Forest where the frogs can thrive.

*Our Response:* Critical habitat is a conservation tool. Conservation measures are a means to reach recovery and the point at which the measures provided under the Act are no longer necessary. This is a broader standard than simply survival and requires the Service to designate critical habitat that will support recovery of the species. DeSoto National Forest (DNF) represents only one area of the historic distribution of the dusky gopher frog. Although DNF is crucial to the survival of the frog because the majority of

the remaining frogs occur there, recovery of the species will require populations of dusky gopher frog distributed across a broader portion of the species' historic distribution. Critical habitat will support recovery of the dusky gopher frog by protecting sites across a large area of the species' historic range and providing space for population expansion, including in areas that will provide protection from the effects of local catastrophic events. See also our response to Comment 16.

#### General Comments Issue 5: Critical Habitat Designation on Lands Leased to the Military

*Comment 19:* The Department of Defense, Army National Guard (DOD) opposes designation of critical habitat in areas within the Camp Shelby training site on DeSoto National Forest (DNF), Forrest County, Mississippi. DOD is concerned that the designation may negatively impact convoy and dismounted infantry training, and that the designation will be an additional financial burden on the military because DOD reimburses the U.S. Forest Service (USFS) for habitat management in the Special Use Permit (SUP) area. Although there are restrictions to military use of the SUP based on guidelines set up for red-cockaded woodpecker population recovery and protection, DOD believes training limitations would be more restrictive for a terrestrial (ground-dwelling) species. Additionally, DOD believes the proposed designation may affect plans to develop new training facilities within the proposed critical habitat areas, which are outlined in long-range planning documents. DOD believes that Camp Shelby training site should be excluded from the critical habitat designation, as authorized by section 4(b)(2) of the Act, due to significant national security concerns.



*Our Response:* DOD has a SUP from USFS to conduct military exercises in Units 10, 11, and 12 of critical habitat for the dusky gopher frog in DNF. Permitted use by the military includes driving military vehicles on existing roads, and bivouacking or orienteering in the forested areas. No live ammunition can be used in the area, and wetlands are excluded from military use. This area of the DNF is also designated as the Leaf River Wildlife Management Area and is actively used by the public for hunting and other recreational activities. The area is managed by the USFS for timber and to benefit the recovery of the red-cockaded woodpecker. The Service has been working with our USFS partners for many years on habitat improvements in this area to benefit the recovery of the dusky gopher frog. The Service anticipates that no additional restrictions on military use of the area will result from the designation of critical habitat for the dusky gopher frog. Under terms of the SUP, DOD management responsibilities relative to the training area involve reimbursing USFS for damage to habitat within the DNF that is incurred during military exercises, whether or not critical habitat is designated there. However, additional incremental impacts to military activities are not expected because areas we designated as dusky gopher frog critical habitat areas used by Camp Shelby are located within a habitat management area (HMA) already established and managed for the red-cockaded woodpecker. The Service believes that the existing limitations to military activities occurring within the HMA are sufficiently protective of the gopher frog. A further discussion of the existing limitations to military activities occurring within the HMA has been added to the final economic analysis (FEA).

*Comment 20:* The Service failed to consider sound science when developing the revised proposed rule. The designation of Unit 1 as critical habitat is deeply flawed for scientific reasons and violates the Presidential Memorandum of Scientific Integrity. The agency actions for this designation are wholly devoid of sound science and undermine public trust.

*Our Response:* Comments questioning aspects of the methodology and data used in our revised proposed designation of critical habitat for the dusky gopher frog have been addressed above under Comments 2, 3, 4, 8, 15, 16, 17, and 18. Scientific peer review of our revised proposed rule supported the science that we used in developing the document. The commenter did not provide specifics about why the Service might be in violation of the President's March 9, 2009, Memorandum concerning Scientific Integrity; however, as illustrated below, we believe our rulemaking meets the standards set forth in the President's memorandum.

In accordance with section 4 of the Act, we are required to use, and we used, the best available scientific and commercial information to make this critical habitat decision. Further, we followed the criteria, established procedures, and guidance from our Policy on Information Standards Under the Endangered Species Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658)), and our associated Information Quality Guidelines.

In order to meet these "best available scientific and commercial information" standards, we found information from many different sources, including articles in peer-

reviewed journals, scientific status surveys and studies, other unpublished materials, and experts' opinions or personal knowledge. Also, in accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited expert opinions from knowledgeable individuals with scientific expertise that included familiarity with the species, the geographic region in which the species occurs, and conservation biology principles. Additionally, we requested comments or information from other concerned governmental agencies, the scientific community, industry, and other interested parties concerning the revised proposed rule. We accepted comments during two open comment periods for a total of 105 days. All of the comments and information we received were considered in finalizing this critical habitat designation for the dusky gopher frog. All the supporting materials used for the final rule, including literature cited and comments from the public and peer reviewers, were made available for public inspection at the website: <http://www.regulations.gov>.

In conclusion, we believe that we have used the best available scientific and commercial information for the designation of critical habitat for the dusky gopher frog, in compliance with the Act and in accordance with the President's March 9, 2009, Memorandum concerning Scientific Integrity (see **Critical Habitat**).

#### General Comments Issue 7: Economic Analysis

*Comment 21:* Two commenters state that the estimated \$36.2 million impact to development activities in proposed Unit 1 should be attributed to that unit and not viewed as an economic impact of the entire 7,015-acre proposed critical habitat area.

*Our Response:* Exhibit ES-2 in the draft economic analysis (DEA) presents the incremental impacts of gopher frog conservation by unit and subunit. The impacts presented in this exhibit were revised in the final economic analysis (FEA) due to the reduction in acreage proposed in the **Federal Register** on January 17, 2012 (77 FR 2254). The FEA's Exhibit ES-2 includes incremental impacts attributable to the areas within proposed Unit 1 ranging from \$0 to \$33.9 million (assuming a 7 percent discount rate). This range reflects uncertainty regarding future land use and gopher frog conservation and recovery recommendations in Unit 1. These impacts are described further in the text following this exhibit (paragraphs 12 and 13 in the FEA's Executive Summary), where the FEA notes that "under scenarios 2 and 3, the greatest incremental impacts are forecast to occur within Unit 1 where present value impacts are equal to \$20.4 million or \$33.9 million, respectively (99.5 and 99.7 percent of overall incremental impacts), applying a seven percent discount rate." Also refer to the "*Economic Analysis*" section of this rule.

*Comment 22:* Multiple commenters assert that controlled burns necessary to properly manage habitat for the gopher frog within proposed Unit 1 will imperil homes and businesses in the vicinity. The commenters note that such burnings may halt development of adjacent lands resulting in the loss of revenue to the landowners and tax revenue to St. Tammany Parish and the State of Louisiana. In addition, burnings are a safety hazard for drivers along LA Highway 36, which runs through proposed critical habitat Unit 1.

*Our Response:* In paragraph 78, the DEA acknowledges landowner concern that

burning may lead to negative impacts in proposed Unit 1. However, as explained in footnote 76, critical habitat designation does not allow the Service to require burning of land parcels. If activities undertaken in Unit 1 have a Federal nexus (as assumed in scenarios 2 and 3 in the DEA), the Service may request burning through the section 7 consultation. Burning would be undertaken by experts following the issuance of a permit based on environmental conditions. In particular, wind conditions are considered when issuing a burning permit to ensure that smoke will not drift onto other properties or across roads. There is considerable uncertainty surrounding the frequency of future burns that may be requested by the Service and whether these burns would lead to any economic impacts; therefore incremental impacts associated with burns are not quantified in the DEA.

*Comment 23:* One commenter describes the potential for oil and gas development in Unit 1 and questions why the DEA does not quantify economic impacts for oil and gas activities. In particular, the commenter indicates that consultation on oil and gas development activities under section 7 of the Act would lead to negative economic impacts. The commenter concludes that the DEA ignores the negative economic impact of consultation on oil and gas activities and is therefore fatally flawed.

*Our Response:* Paragraph 79 of the DEA summarizes the potential for economic impacts to oil and gas activities in proposed Unit 1. The DEA concludes that it is possible that “in the case oil and gas development occurs on this land, and a Federal nexus is present triggering section 7 consultation, that there may be economic impacts of critical habitat designation for the gopher frog on this activity.” As summarized on pages

ES-4 and ES-5, the DEA assumes that a Federal nexus is present under scenarios 2 and 3 because of the need for a Corps Clean Water Act Section 404 permit. The DEA assumes that there is no Federal nexus triggering section 7 consultation under scenario 1. Despite the fact that the DEA assumes a Federal nexus is present under scenarios 2 and 3, and the DEA indicates that economic impacts to oil and gas activities may be “possible,” the DEA does not quantify these impacts due to considerable uncertainty surrounding the likelihood, timing, and extent of oil and gas development within Unit 1 over the foreseeable future. Instead, the DEA qualitatively discusses the impacts that may occur, such as increased operational costs due to the need to use directional drilling to access oil and gas resources within proposed critical habitat areas.

*Comment 24:* One comment indicates that the DEA underestimates adverse economic impacts in proposed Unit 1 by failing to quantify potential impacts to forestry activities. The commenter notes that in light of recent litigation and Federal agency initiatives, the likelihood of a Federal nexus for forestry activities is not zero and therefore costs associated with future consultation on these activities should be included in the analysis.

*Our Response:* The DEA includes a section on potential impacts to forestry activities. Paragraph 95 of the DEA explains that, “in general, normal silvicultural activities are exempt from section 404 permitting requirements.” Although this statement is currently true, recent litigation and Federal agency initiatives could create a circumstance in which silviculture operations are no longer exempt from section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) permitting requirements. A section has

been added to the FEA in Chapter 4 to describe the recent and potential future changes. Nevertheless, considerable uncertainty surrounds these rulings and whether they will in fact change the permitting requirements for silvicultural operations in Mississippi and Louisiana within the next 20 years. It follows that the likelihood for these activities to be subject to section 7 consultation considering the gopher frog and its habitat is likewise uncertain. Therefore, the FEA discusses this potential impact qualitatively.

*Comment 25:* One comment asserts that the Service fails to seriously consider the burden that section 7 consultation will place on the landowners of proposed Unit 1. The commenter expresses concern that the consultation process itself, as well as the outcome of consultation on development within proposed Unit 1, will have negative economic impacts.

*Our Response:* The DEA estimates a range of possible incremental economic impacts to development in Unit 1. Two of the possible scenarios include the administrative cost of section 7 consultation, as well as a range of impacts associated with the lost value of that land for development assuming that consultation leads to the Service recommending that development be avoided within all or part of the unit. The administrative costs of consultation applied in this analysis are summarized in Exhibit 2-2 and are based on a review of consultation records from several Service field offices across the country conducted in 2002, and the Federal Government Schedule rates. Costs associated with lost development value of the land within proposed Unit 1 are described in the DEA's section 4-1. The DEA also includes a scenario which assumes that development occurring within Unit 1 avoids impacts on jurisdictional wetlands, and

therefore the landowners will not be required to consult with the Service regarding gopher frog critical habitat. This low-end impact estimate is included due to uncertainty regarding the likelihood of a Federal nexus for development activities in Unit 1 and the conservation measures that the Service may recommended if consultation does occur.

*Comment 26:* Multiple commenters assert that designation would lead to lost tax revenues for the local government and State.

*Our Response:* The designation of critical habitat is not expected to have an effect on broader regional real estate demand and supply in St. Tammany Parish due to the existence of substitute sites for development activities. As a result, impacts to the regional construction industry and loss in revenue associated with home and business sales are not anticipated to occur. In addition, a reduction in housing supply is unlikely due to the existence of substitute sites, and, in turn, a measurable loss of tax revenue is not expected. A discussion of the potential effect on the regional real estate market has been added to the FEA.

*Comment 27:* One commenter states that the DEA fails to consider the incremental impacts to future activities in Unit 1 that would be borne by future landowners residing within the unit after it has been developed for residential and commercial uses.

*Our Response:* As described in section 4.1 of the DEA, under scenario 1, no Federal nexus compelling section 7 consultation would occur and therefore no additional



economic burdens would be expected for those families and businesses that purchase developed lands. Under scenario 3, no development would occur and thus impacts would be expected to be limited to the existing landowners. Therefore, scenario 2 is the only scenario in which both development and a Federal nexus would be expected to occur. Under this scenario, there is the potential that additional economic impacts could be incurred by landowners who purchase this developed property; however, this would occur only if the landowners undertake activities that result in a Federal nexus. The extent of these impacts would depend on the type and timing of future projects. In general, consultation with the Service at sites that have already been developed are rare. Given the inherent uncertainty, impacts to future landowners cannot be quantified in scenario 2.

*Comment 28:* One commenter asserts that the Service unjustly ignores the negative economic impacts in Unit 1 on the landowners and St. Tammany Parish by deeming the impacts “insignificant.”

*Our Response:* In the revised proposed rule published in the **Federal Register** on September 27, 2011 (76 FR 59774), the Service states that, “if promulgated, the proposed designation would not directly have a significant effect on a substantial number of small business entities.” This certification is based on the screening level analysis of the potential for gopher frog critical habitat designation to affect small entities contained in Appendix A of the DEA. The results of this screening analysis were revised in the FEA due to the reduction in acreage proposed in the **Federal Register** on January 17, 2012 (77 FR 2254). The screening analysis in the FEA finds that five small entities will be

affected by the designation of critical habitat for the gopher frog, accounting for 3.9 percent of the total small Land Subdividers within the counties containing critical habitat. In addition, this screening analysis finds that the annualized impact of the proposed designation of critical habitat within Unit 1 represents from zero to 44.7 percent of the average annual revenue for the four small entities affected in Unit 1. Based on these findings in the screening analysis and the tests set forth under the Small Business Regulatory Enforcement Fairness Act (SBREFA), we certified that, “if promulgated, the proposed designation would not directly have a significant effect on a substantial number of small business entities.”

*Comment 29:* One commenter states that the benefits of designating proposed Unit 1 as critical habitat are vague and highly speculative and not quantified in the DEA on page 5-2.

*Our Response:* As stated in paragraph 53 of the DEA, the “primary purpose of the rulemaking (i.e., the direct benefit) is the potential to enhance conservation of the species.” OMB acknowledges in its guidance for implementing Executive Order 12866 that it may not be feasible to monetize or quantify the benefits of environmental regulations due to either an absence of studies or a lack of resources on the implementing agency’s part to conduct new research. Instead of relying on economic measures, the Service believes that the benefits of the proposed rule are best expressed in biological terms that can then be weighed against the expected costs of the rulemaking.

*Comment 30:* One commenter asks whether having a Federal home loan or insurance would constitute a Federal nexus.

*Our Response:* No. Federal home loans are not made directly to individuals by the Federal government. Transactions are made with member banks and decisions about lending are then made by member banks; therefore there is no Federal action agency with regard to critical habitat. With regard to Federal flood insurance, if the Federal Emergency Management Agency (FEMA) were to undertake an action or fund an action that could impact critical habitat, it would need to consult with the Service on that action. However, when FEMA simply makes decisions regarding who receives Federal flood insurance, there is no action that would trigger consultation under the Act.

*Comment 31:* Multiple commenters assert that the DEA fails to analyze all impacts of critical habitat designation, regardless of whether those impacts are co-extensive with those of the listing. These commenters cite the ruling in *New Mexico Cattle Growers Association v. U.S. Fish and Wildlife Service*, 248 F.3d 1277 (10<sup>th</sup> Cir. 2001), in which the Court ruled that economic analyses must consider the co-extensive impacts of critical habitat designation.

*Our Response:* The identification and estimation of incremental impacts is consistent with direction provided by the Office of Management and Budget (OMB) to Federal agencies for the estimation of the costs and benefits of Federal regulations (see OMB, Circular A-4, 2003). It is also consistent with several recent court decisions, including *Cape Hatteras Access Preservation Alliance v. U.S. Department of the Interior*, 344 F. Supp. 2d 108 (D.D.C.) and *Center for Biological Diversity v. U.S. Bureau of Land Management*, 422 F. Supp. 2d 1115 (N.D. Cal. 2006). Those decisions found that

estimation of incremental impacts, i.e., those stemming solely from the designation, is proper.

*Comment 32:* One commenter states that the proposed designation of critical habitat in southern Forrest County, Units 8 and 9, will prevent future development and timber management in the area. The commenter believes that the economic costs to Forrest County and its citizens outweigh the benefits of designation.

*Our Response:* As presented in Exhibit 1-1 of the DEA, all but 5 acres of the land proposed for designation within Units 8 and 9 are federally managed. As described in section 3-1 of the DEA, the portions of proposed Units 8 and 9 that fall within the DNF are actively managed by the USFS for the benefit of the gopher frog. Costs associated with the designation of critical habitat within these areas are limited to the administrative cost of a programmatic consultation with USFS on their gopher frog management activities. Because the USFS has worked closely with the Service to develop their current management practices on these lands, no additional project modifications are expected to result from the consultation. Therefore, the DEA does not anticipate that future development or timber management will be affected by the designation of critical habitat. Therefore, the DEA does not estimate any costs to Forrest County or private landowners within Units 8 and 9.

*Comment 33:* Multiple comments state that all privately owned lands, with the exception of those owned by supporters of the designation, should be excluded from the designation of critical habitat. These commenters assert that the proposed designation will negatively affect property values, the livelihood of landowners, and thus the local economy.

*Our Response:* All known reasonably foreseeable economic impacts on privately owned lands are quantified in the DEA. In particular, section 4.1 of the DEA quantifies potential impacts to land value within Unit 1. In addition to these direct impacts to land value, paragraph 51 of the DEA describes the potential indirect stigma effect that the designation of critical habitat may have on property values. Measurable stigma effects are unlikely, and thus they are quantified in the DEA.

### **Summary of Changes from Revised Proposed Rule**

In preparing this final rule, we reviewed and fully considered comments from the public and peer reviewers that we received in response to our revised proposed rule designating critical habitat for the dusky gopher frog published in the **Federal Register** on September 27, 2011 (76 FR 59774). Based on information we received from peer reviewers, we amended the methodology we used in constructing critical habitat units. This change is described in detail in our January 17, 2012 publication announcing a public hearing in the **Federal Register** (77 FR 2254). Proposed changes included: combining all movement data from different studies conducted at the same site; discarding one field observation from the movement data because it did not provide specific information on breeding pond or upland habitat use; and standardizing all movement data to reflect straight-line distances between breeding ponds and uplands. As a result of these changes, proposed critical habitat for the dusky gopher frog was reduced by 193 ha (477 ac).

During a review of aerial photography prior to making the final maps of critical habitat for this final rule, we identified an agricultural field within critical habitat Unit 10

as it was described in the revised proposed rule. Because this agricultural area does not contain habitat suitable for the dusky gopher frog, it has been removed from the critical habitat designation. This change resulted in a further reduction of critical habitat of 35 ha (87 ac).

As a result of these two changes, there is a total reduction of 228 ha (564 ac) from the critical habitat we proposed on September 27, 2011, (76 FR 59774). In this rule we are designating approximately 2,621 ha (6,477 ac) of critical habitat for the dusky gopher frog.

## **Critical Habitat**

### *Background*

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features

(a) Essential to the conservation of the species and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided under the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) of the Act would apply, but even in the event of a destruction or adverse modification finding, the obligation of the Federal action agency and the landowner is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographic area occupied by the species at the time it was listed are included in a critical habitat designation if they contain the physical and biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical and biological features within an area, we focus on the principal biological or physical constituent elements (primary constituent elements such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type) that are essential to the conservation of the species. Primary constituent elements are the elements of physical or biological features that, when laid out in the appropriate quantity and spatial arrangement to provide for a species' life-history processes, are essential to the conservation of the species.

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographic area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. For example, an area currently occupied by the species but that was not occupied at the time of listing may be essential to the conservation of the species and may be included in the critical habitat designation. We designate critical habitat in areas outside the geographic area occupied by a species only when a designation limited to its range would be inadequate to ensure the conservation of the species.



Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific and commercial data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658)), and our associated Information Quality Guidelines, provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we determine which areas should be designated as critical habitat, our primary source of information is generally the information developed during the listing process for the species. Additional information sources may include the recovery plan for the species, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, other unpublished materials, or experts' opinions or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat

outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act; (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species; and (3) the prohibitions of section 9 of the Act if actions occurring in these areas may affect the species. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

#### *Physical or Biological Features*

In accordance with section 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12, in determining which areas within the geographic area occupied by the species at the time of listing to designate as critical habitat, we consider the physical or biological features essential to the conservation of the species and which may require special management considerations or protection. These include, but are not limited to:

- (1) Space for individual and population growth and for normal behavior;
- (2) Food, water, air, light, minerals, or other nutritional or physiological requirements;
- (3) Cover or shelter;
- (4) Sites for breeding, reproduction, or rearing (or development) of offspring; and
- (5) Habitats that are protected from disturbance or are representative of the historical, geographic, and ecological distributions of a species.

We derive the specific physical or biological features required for the dusky gopher frog from studies of this species' habitat, ecology, and life history as described in the **Critical Habitat** section of the revised proposed rule to designate critical habitat published in the **Federal Register** on September 27, 2011 (76 FR 59774), and in the information presented below. Additional information can be found in the final listing rule published in the **Federal Register** on December 4, 2001 (66 FR 62993). We have determined that the dusky gopher frog requires the following physical or biological features.

#### Space for Individual and Population Growth and for Normal Behavior

Dusky gopher frogs are terrestrial amphibians endemic to the longleaf pine ecosystem. They spend most of their lives underground in forested habitat consisting of fire-maintained, open-canopied, pine woodlands historically dominated by longleaf pine (naturally occurring slash pine (*Pinus elliottii*) in wetter areas). Optimal habitat is created

when management includes frequent fires, which support a diverse ground cover of herbaceous plants, both in the uplands and in the breeding ponds (Hedman *et al.* 2000, p. 233; Kirkman *et al.* 2000, p. 373). Historically, fire-tolerant longleaf pine dominated the uplands; however, much of the original habitat has been converted to pine (often loblolly (*P. taeda*) or slash pine) plantations and has become a closed-canopy forest unsuitable as habitat for dusky gopher frogs and other species of gopher frogs (Roznik and Johnson 2009a, p. 265).

During the breeding season, dusky gopher frogs leave their subterranean retreats in the uplands and migrate to their breeding sites during rains associated with passing cold fronts. Breeding sites are ephemeral (seasonally flooded), isolated ponds (not connected to other water bodies) located in the uplands. Both forested uplands and isolated wetlands (see “*Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring*” for further discussion of isolated wetlands) are needed to provide space for individual and population growth and for normal behavior.

After breeding, adult dusky gopher frogs leave pond sites during major rainfall events; metamorphic frogs follow, after their development is complete. Limited data are available on the distance between the wetland breeding and upland terrestrial habitats of post-larval and adult dusky gopher frogs. Richter *et al.* (2001, pp. 316–321) used radio transmitters to track a total of 13 adult frogs at Glen’s Pond, the primary dusky gopher frog breeding site, located in Harrison County, Mississippi. The farthest movement recorded was 299 meters (m) (981 feet (ft)) by a frog tracked for 63 days from the time of

its exit from the breeding site (Richter *et al.* 2001, p. 318). Tupy and Pechmann (2011, p. 1) conducted a more recent radio telemetry study of 17 dusky gopher frogs captured at Glen's Pond. The maximum distance traveled by these frogs to underground refuges was 240 m (787 ft).

Studies of a closely related gopher frog (*Rana capito*) in Florida, Georgia, and North Carolina, have documented surprisingly long movements between their breeding ponds and upland refugia. In a study in the sandhills of North Carolina, the post-breeding movements of 17 gopher frogs were tracked (Humphries and Sisson 2011, p. 1). The maximum distance a frog was found from its breeding site was 3.5 kilometers (km) (2.2 miles (mi)). In Florida, gopher frogs have been found up to 2 km (1.2 mi) from their breeding sites (Franz *et al.* 1988, p. 82). The frequency of these long-distance movements is not known (see discussion in Roznik *et al.* 2009, p. 192). A number of other gopher frog studies have either generated data on radio-tracked frogs, or provided observations of them, in upland habitat at varying distances from their breeding ponds. We assessed these studies, and when multiple studies were conducted on a single population, we combined data for each site (we also combined the two data sets for dusky gopher frog). In the additional gopher frog studies, the maximum straight-line distances from pond to upland refugia are: 300 m (984 ft) (Georgia; Rostal 1999, p. 1); 525 m (1,722 ft) (Georgia; Neufeldt and Birkhead 2001, p. 10); 571 m (1,873 ft) (Florida; Blihovde 2006, p. 267); and 862 m (2,828 ft) (Florida; Roznik 2007, p. 10).

It is difficult to interpret specific habitat use for the dusky gopher frog from the

limited available data. Movements are generally between breeding sites and belowground refugia, and distances moved are likely to be tied to the abundance and distribution of appropriate refugia. We have assumed that the dusky gopher frog can move farther distances, and may use a larger area, than the existing data for the species indicate. For this reason, we used data from the dusky gopher frog and other species of gopher frogs to estimate the potential distance a dusky gopher frog may move between its breeding pond and upland refugia. These seven values included the longest movement recorded for the dusky gopher frog, 299 m (981 ft), and the six values for other species of gopher frogs as described in the paragraph above. We then took the median value of all the dusky gopher frog and gopher frog movement data available to us (571 m (1,873 ft)), and used this value to construct the area of critical habitat around each occupied or unoccupied dusky gopher frog breeding pond. See also **Summary of Changes from Revised Proposed Rule**, above.

Due to the low number of occupied sites for the species, and with the cooperation of our Federal, State, and nongovernmental agency partners, management has been conducted at specific sites to improve habitat for dusky gopher frogs with the hope of establishing new populations at the sites (see “*Criteria Used To Identify Critical Habitat*”). When possible, we are managing wetlands in these areas within 1,000 m (3,281 ft) of each other as a block in order to create multiple breeding sites and metapopulation structure (defined as neighboring local populations close enough to one another that dispersing individuals could be exchanged (gene flow) at least once per generation) in support of recovery (Marsh and Trenham 2001, p. 40; Richter *et al.* 2003,

p. 177).

Due to fragmentation and destruction of habitat, the current range of naturally occurring dusky gopher frogs has been reduced to three sites (Glen's Pond, Mike's Pond, and McCoy's Pond). In addition, optimal terrestrial habitat for gopher frogs is considered to be within burrows of the gopher tortoise (*Gopherus polyphemus*), a rare and declining species that is listed as threatened under the Act within the range of the dusky gopher frog. Therefore, this specialized microhabitat has been reduced as well. Fragmentation and loss of the dusky gopher frog's habitat has subjected the species' small, isolated populations to genetic isolation and reduction of space for reproduction, development of young, and population maintenance; thus, the likelihood of population extinction has increased (U.S. Fish and Wildlife Service 2001, pp. 62993–63002). Genetic variation and diversity within a species are essential for recovery, adaptation to environmental changes, and long-term viability (capability to live, reproduce, and develop) (Harris 1984, pp. 93–107). Long-term viability is founded on the existence of numerous interbreeding, local populations throughout the range (Harris 1984, pp. 93–107).

Connectivity of dusky gopher frog breeding and nonbreeding habitat within the geographic area occupied by the species must be maintained to support the species' survival. Additionally, connectivity of these sites with other areas outside the geographic area occupied currently by the dusky gopher frog is essential for the conservation of the species. Research on other species of pond-breeding amphibians demonstrates the

importance of connectivity of breeding and nonbreeding habitat, as well as occupied and unoccupied sites (Semlitsch 2002, p. 624; Harper *et al.* 2008, p. 1205). Connectivity allows for gene flow among local populations within a metapopulation, which enhances the likelihood of metapopulation persistence and allows for recolonization of sites that are lost due to drought, disease, or other factors (Hanski and Gilpin 1991, pp. 4–6).

#### Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

Dusky gopher frog tadpoles eat periphyton (microscopic algae, bacteria, and protozoans) from surfaces of emergent vegetation or along the pond bottom, as is typical of pond-type tadpoles (Duellman and Trueb 1986, p. 159). Juvenile and adult gopher frogs are carnivorous. Insects found in their stomachs have included carabid (*Pasimachus* sp.) and scarabaeid (genera *Canthon* sp. and *Ligyrus* sp.) beetles (Netting and Goin 1942, p. 259) and *Ceuthophilus* crickets (Milstrey 1984, p. 10). Dusky gopher frogs are gape-limited (limited by the size of the jaw opening) predators with a diet probably similar to that reported for other gopher frogs, including other frogs, toads, beetles, hemipterans, grasshoppers, spiders, roaches, and earthworms (Dickerson 1969, p. 196; Carr 1940, p. 64). Within the pine uplands, a diverse and abundant herbaceous layer consisting of native species, maintained by frequent fires, is important to maintain the prey base for juvenile and adult dusky gopher frogs. Wetland water quality and an open canopy (Skelly *et al.* 2002, p. 983) are important to the maintenance of the periphyton that serves as a food source for dusky gopher frog tadpoles.



## Cover or Shelter

Amphibians need to maintain moist skin for respiration (breathing) and osmoregulation (controlling the amounts of water and salts in their bodies) (Duellman and Trueb 1986, pp. 197–222). Because dusky gopher frogs disperse from their aquatic breeding sites to the uplands where they live as adults, desiccation (drying out) can be a limiting factor in their movements. Thus, it is important that areas connecting their wetland and terrestrial habitats are protected in order to provide cover and appropriate moisture regimes during their migration. Richter *et al.* (2001, pp. 317–318) found that during migration, dusky gopher frogs used clumps of grass or leaf litter for refuge. Protection of this connecting habitat may be particularly important for juveniles as they move out of the breeding pond for the first time. Studies of migratory success in post-metamorphic amphibians have demonstrated the importance of high levels of survival of these individuals to population maintenance and persistence (Rothermel 2004, pp. 1544–1545).

Both adult and juvenile dusky gopher frogs spend most of their lives underground in forested uplands (Richter *et al.* 2001, p. 318). Underground retreats include gopher tortoise burrows, small mammal burrows, stump holes, and root mounds of fallen trees (Richter *et al.* 2001, p. 318). Availability of appropriate underground sites is especially important for juveniles in their first year. Survival of juvenile gopher frogs in north-central Florida was found to be dependent on their use of underground refugia (Roznik and Johnson 2009b, p. 431). Gopher frogs that did not occupy an underground refuge

experienced much higher levels of mortality when compared with those that did occupy underground refuges (Roznik and Johnson 2009b, p. 434).

#### Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring

Dusky gopher frog breeding sites are isolated ponds that dry completely on a cyclic basis. Faulkner (U.S. Fish and Wildlife Service 2001, p. 62994) conducted hydrologic research at the Glen's Pond site in DNF, Harrison County, Mississippi. He described the pond as a depressional feature on a topographic high. The dominant source of water to the pond is rainfall within a small, localized watershed that extends 61 to 122 m (200 to 400 ft) from the pond's center. Substantial winter rains are needed to ensure that the pond fills sufficiently to allow hatching, development, and metamorphosis (change to adults) of larvae. The timing and frequency of rainfall are critical to the successful reproduction and recruitment of dusky gopher frogs. Adult frogs move to wetland breeding sites during heavy rain events, usually from January to late March (Richter and Seigel 2002, p. 964).

Studies at Glen's Pond indicate that this breeding pond is approximately 1.5 ha (3.8 ac) when filled and attains a maximum depth of 1.1 m (3.6 ft) (Thurgate and Pechmann 2007, p. 1846). The pond is hard-bottomed, contains emergent and submergent vegetation, and has an open canopy cover. It is especially important that a breeding pond have an open canopy; although the mechanism is unclear, it is believed an open canopy is critical to tadpole development. Experiments conducted by Thurgate and

Pechmann (2007, pp. 1845–1852) demonstrated the lethal and sublethal effects of canopy closure on dusky gopher frog tadpoles. Canopy closure reduced the number of tadpoles that survived to metamorphosis and reduced the growth rates of those that did survive so that they were smaller at metamorphosis (Thurgate and Pechmann 2007, pp. 1845). The general habitat attributes of the other three dusky gopher frog breeding ponds are similar to those of Glen's Pond. Female dusky gopher frogs attach their eggs to rigid vertical stems of emergent vegetation (Young 1997, p. 48). Breeding ponds typically dry in early to mid-summer, but on occasion have remained wet until early fall (Richter and Seigel 1998, p. 24). Breeding ponds of closely related gopher frogs in Alabama (east of the Mobile River drainage) and Florida have similar structure and function to those of the dusky gopher frog (Bailey 1990, p. 29; Palis 1998, p. 217; Greenberg 2001, p. 74).

An unpolluted wetland with water free of predaceous fish, suspended sediment, pesticides, and chemicals associated with road runoff is important for egg development, tadpole growth and development, and successful mating and egg-laying by adult frogs. For further information see our December 4, 2001, listing rule (66 FR 62993).

#### Primary Constituent Elements for the Dusky Gopher Frog

Under the Act and its implementing regulations, we are required to identify the physical or biological features essential to the conservation of the dusky gopher frog in areas occupied at the time of listing, focusing on the features' primary constituent elements. We consider primary constituent elements to be the elements of physical or

biological features that, when laid out in the appropriate quantity and spatial arrangement to provide for a species' life-history processes, are essential to the conservation of the species.

Based on our current knowledge of the physical or biological features (discussed above) and habitat characteristics required to sustain the species' life-history processes, we determine that the primary constituent elements specific to the dusky gopher frog are:

(1) Primary Constituent Element 1—*Ephemeral wetland habitat*. Breeding ponds, geographically isolated from other waterbodies and embedded in forests historically dominated by longleaf pine communities, that are small (generally <0.4 to 4.0 ha (<1 to 10 ac)), ephemeral, and acidic. Specific conditions necessary in breeding ponds to allow for successful reproduction of dusky gopher frogs are:

- (a) An open canopy with emergent herbaceous vegetation for egg attachment;
- (b) An absence of large, predatory fish that prey on frog larvae;
- (c) Water quality such that frogs, their eggs, or larvae are not exposed to pesticides or chemicals and sediment associated with road runoff; and
- (d) Surface water that lasts for a minimum of 195 days during the breeding season to allow a sufficient period for larvae to hatch, mature, and metamorphose.

(2) Primary Constituent Element 2—*Upland forested nonbreeding habitat*. Forests historically dominated by longleaf pine, adjacent to and accessible to and from breeding ponds, that are maintained by fires frequent enough to support an open canopy

and abundant herbaceous ground cover and gopher tortoise burrows, small mammal burrows, stump holes, or other underground habitat that the dusky gopher frog depends upon for food, shelter, and protection from the elements and predation.

(3) Primary Constituent Element 3—*Upland connectivity habitat*. Accessible upland habitat between breeding and nonbreeding habitats to allow for dusky gopher frog movements between and among such sites. This habitat is characterized by an open canopy, abundant native herbaceous species, and a subsurface structure that provides shelter for dusky gopher frogs during seasonal movements, such as that created by deep litter cover, clumps of grass, or burrows.

With this designation of critical habitat, we intend to identify the physical or biological features essential to the conservation of the species through the identification of the elements of the features, the primary constituent elements, that support the life-history processes of the species. The Service has determined that Unit 2a contained all of the PCEs, Units 2b through 12 are essential to the conservation of the species and also contain all of the PCEs, and Unit 1 is essential to the conservation of the species and contains one of the PCEs.

### *Special Management Considerations or Protection*

When designating critical habitat, we assess whether the specific areas within the

geographic area occupied by the species at the time of listing contain features that are essential to the conservation of the species and which may require special management considerations or protection.

All areas occupied at the time of listing will require some level of management to address the current and future threats to the dusky gopher frog and to maintain or restore the PCEs. Unoccupied areas will also require management to complete restoration. The features essential to the conservation of this species may require special management considerations or protection to reduce various threats to critical habitat that may affect one or more of the PCEs. Special management of ephemeral wetland habitats ((breeding sites (PCE 1)) will be needed to ensure that these areas provide water quantity, quality, and appropriate hydroperiod; cover; and absence from levels of predation and disease that can affect population persistence. In nonbreeding upland forested habitat (PCEs 2 and 3), special management will be needed to ensure an open canopy and abundant herbaceous ground cover; underground habitat for adult and subadult frogs to occupy; and sufficient cover as frogs migrate to and from breeding sites. A detailed discussion of activities influencing the dusky gopher frog and its habitat can be found in the final listing rule (66 FR 62993; December 4, 2001). Activities that may warrant special management of the physical or biological features that define essential habitat (appropriate quantity and distribution of PCEs) for the dusky gopher frog include, but are not limited to: (1) Land use conversions, primarily urban development and conversion to agriculture and pine plantations; (2) stump removal and other soil-disturbing activities that destroy the belowground structure within forest soils; (3) fire suppression and low fire frequencies;

(4) wetland destruction and degradation; (5) random effects of drought or floods; (6) off-road vehicle use; (7) maintenance of gas, water, electrical power, and sewer easements; and (8) activities that disturb underground refugia used by dusky gopher frogs for foraging, protection from predators, and shelter from the elements.

Special management considerations or protection are required within critical habitat areas to address the threats identified above. Management activities that could ameliorate these threats include (but are not limited to): (1) Maintaining critical habitat areas as forested pine habitat (preferably longleaf pine); (2) conducting forestry management using prescribed burning, avoiding the use of beds when planting trees, and reducing planting densities to create or maintain an open canopied forest with abundant herbaceous ground cover; (3) maintaining forest underground structure such as gopher tortoise burrows, small mammal burrows, and stump holes; (4) and protecting ephemeral wetland breeding sites from chemical and physical changes to the site that could occur by presence or construction of ditches or roads.

#### *Criteria Used To Identify Critical Habitat*

As required by section 4(b)(1)(A) of the Act, we use the best scientific and commercial data available to designate critical habitat. We reviewed available information pertaining to the habitat requirements of the species. In accordance with the Act and its implementing regulation at 50 CFR 424.12(e), we consider whether designating additional areas—outside those currently occupied as well as those occupied

at the time of listing—are necessary to ensure the conservation of the species. We are designating critical habitat in areas within the geographic area occupied by the species at the time of listing in 2001. We also are designating specific areas outside the geographic area occupied by the species at the time of listing, including those that are currently occupied, and others which are currently unoccupied. Most of the unoccupied areas designated as critical habitat are part of ongoing recovery initiatives for this species. We have determined that all areas designated as critical habitat outside the area occupied by the species at the time of listing are essential for the conservation of the species.

Dusky gopher frogs require small, isolated, ephemeral, acidic, depressional standing bodies of freshwater for breeding; upland pine forested habitat that has an open canopy maintained by fire (preferably) for nonbreeding habitat; and upland connectivity habitat areas that allow for movement between nonbreeding and breeding sites. Dusky gopher frog populations are likely to function as metapopulations when occupied habitat is improved and that option is available to them since other species of gopher frogs behave in this way. In certain years and under certain conditions, dusky gopher frogs may move from ponds that become unsuitable to others that are suitable. Or in some years, if ponds fail to fill with water, local extirpations may occur and dusky gopher frogs from adjacent ponds may recolonize those sites when they fill with water again. The range of the dusky gopher frog has been severely curtailed, occupied habitats are limited and isolated, and population sizes are extremely small and at risk of extirpation and extinction from stochastic events that occur as periodic natural events or existing or potential human-induced events (U.S. Fish and Wildlife Service 2001, pp. 62993–63002).



To reduce the risk of extinction through these processes, it is important to establish multiple protected subpopulations across the landscape (Soulé and Simberloff 1986, pp. 25–35; Wiens 1996, pp. 73–74). We considered the following criteria in the selection of areas that contain the essential features for the dusky gopher frog when designating units: (1) The historical distribution of the species; (2) presence of open-canopied, isolated wetlands; (3) presence of open-canopied, upland pine forest in sufficient quantity around each wetland location to allow for sufficient survival and recruitment to maintain a breeding population over the long term; (4) open-canopied, forested connectivity habitat between wetland and upland sites; and (5) multiple isolated wetlands in upland habitat that would allow for the development of metapopulations.

We began our determination of which areas to designate as critical habitat for the dusky gopher frog with an assessment of the critical life-history components of the dusky gopher frog, as they relate to habitat. We then evaluated the dusky gopher frog in the context of its historic (Alabama (west of the Mobile River drainage), Louisiana, and Mississippi) and current (Mississippi) distribution to establish what portion of its range still contains the physical and biological features that are essential to the conservation of the species. We reviewed the available information pertaining to historic and current distributions, life histories, and habitat requirements of this species. We focused on the identification of ephemeral wetland habitats in our analysis because they are requisite sites for population survival and conservation and their rarity in the environment is one of the primary reasons that the frog is endangered. Our sources included surveys, unpublished reports, and peer-reviewed scientific literature prepared by the Alabama

Department of Conservation and Natural Resources, Alabama Natural Heritage Program, Louisiana Department of Wildlife and Fisheries, Natural Heritage Program, Mississippi Department of Wildlife, Fisheries, and Parks, and dusky gopher frog researchers and other herpetologists that specialize in frogs; Service data and publications such as the final listing rule for the dusky gopher frog; and Geographic Information System (GIS) data (such as species occurrence data, habitat data, land use, topography, digital aerial photography, and ownership maps).

In Alabama, we were unable to identify habitat that met the requirements for sustaining the essential life-history functions of the species. No historical breeding sites for the species are known in Alabama. The only dusky gopher frog (as currently described) record from Alabama was an observation by Löding in 1922, and summarized in Wright and Wright (1949, p. 539). Löding found three gopher frogs under drift logs on the beach of Mobile Bay just south of the mouth of Dog River, Mobile County, Alabama. Bailey (1994, pp. 4-5) visited this area in 1993, and found it to be a residential development, although large longleaf pine trees in lawns and vacant lots indicated the area could have formerly been suitable upland habitat for gopher frogs. Neither Löding nor Bailey located a possible breeding site in the vicinity of the record. Researchers have conducted two studies in southwestern Alabama to look for habitat that could support dusky gopher frogs. Hart (2004, pp. 1-9) initiated a remote sensing study using aerial photography of Mobile and Washington Counties, Alabama, to find open, isolated ponds in proximity to forested terrain. This technique was used to identify sites with the potential for supporting dusky gopher frog populations. Hart (2004, pp. 1-9) conducted

field assessments of 41 ponds in Mobile County, Alabama, but habitat quality at these ponds was limited. Ponds were overgrown with woody vegetation and lacked the emergent vegetation necessary for dusky gopher frog egg attachment (Hart 2004, p. 9). Additional ponds were identified remotely in Washington County, Alabama, but were not visited, and their habitat quality is unknown. Bailey (2009, pp. 1-14) used a similar remote sensing technique to locate a total of 21 ponds in Choctaw, Mobile, and Washington Counties, Alabama. However, this was a coarse filter approach, and field assessments were not possible due to drought conditions and inaccessibility resulting from site isolation. No areas suitable for conservation of the dusky gopher frog were identified in either of the remote sensing studies. No dusky gopher frog populations in Alabama were discovered during field assessments associated with Hart's (2004, pp. 1-9) study. At this time, the Service has not been able to identify suitable areas in Alabama that are essential for the conservation of the dusky gopher frog; thus, none are being designated as critical habitat.

In Louisiana, the dusky gopher frog was last observed in 1965. The Service visited the area of historic dusky gopher frog occurrence in St. Tammany Parish, Louisiana, and conducted a habitat assessment in March 2011. The area is managed for timber by a company conducting industrial forestry. Although the surrounding uplands are poor-quality terrestrial habitat for dusky gopher frogs, we visited at least five ephemeral ponds, including the last known record of the species in Louisiana. These ponds were intact and of remarkable quality. This same area was surveyed for gopher frogs in the 1990s and 2000s. During those visits, the ephemeral ponds were considered

similar in appearance (water clarity, depth, vegetation) to ponds in Mississippi used for breeding by the dusky gopher frog (Thomas and Ballew 1997, p. 6; Leonard *et al.* 2003, pp. 7-8; Pechmann *et al.* 2006, pp. 8, 10). Our observations in 2011 indicated the Louisiana ponds were little changed from the descriptions provided by the previous surveyors. In addition, the ponds are in close proximity to each other, which would allow movement of adult gopher frogs between them. In fact, no group of five ponds such as these was found in any of the areas of historical occurrence that we have searched in Mississippi. Dusky gopher frogs exhibit high larval and juvenile mortality. Multiple breeding sites protect against catastrophic loss at any one site and provide opportunity for recolonization. This is an especially important aspect of critical habitat for dusky gopher frogs due to their limited population numbers. The multiple ponds present at the St. Tammany Parish site provide metapopulation structure that supports long-term survival and population resiliency. As a result, the Service determined that this area of St. Tammany Parish (Unit 1) is essential for the conservation of the dusky gopher frog.

In Mississippi, we identified ephemeral wetland habitat throughout the coastal counties within the historic distribution of the dusky gopher frog using U.S. Geological Survey topographic maps, National Wetland Inventory maps, Natural Resource Conservation Service county soil survey maps, and satellite imagery. Because we had previously identified existing sites with habitat essential for the conservation of the dusky gopher frog in our 2010 proposed rule (75 FR 31387), we searched for additional habitat with the best potential of restoring the physical and biological features essential for the conservation of the dusky gopher frog. We found these areas were concentrated on the

DNF in Forrest, Harrison, and Perry Counties in southern Mississippi. Some additional sites were found in Jackson County on Federal land being managed by the State as a Wildlife Management Area and on private land being managed as a wetland mitigation bank. Once these areas were identified, we coordinated with our partners in the U.S. Forest Service, the U.S. Army Corps of Engineers, the Mississippi Department of Wildlife, Fisheries, and Parks, and The Nature Conservancy as they worked on habitat restoration efforts at the sites. The habitat quality of isolated ephemeral wetlands and the upland pine forests surrounding them were improved to benefit the recovery of the dusky gopher frog. The habitat restoration efforts have been successful in establishing or improving the quality of the three PCEs required to sustain the dusky gopher frog's life-history processes on each of these sites. Therefore, the Service has determined that these unoccupied sites are essential for the conservation of the species.

Only one subunit (Unit 2, subunit A) is known to have been occupied at the time of listing. We believe this occupied area contains sufficient PCEs to support life-history functions essential to the conservation of the species; however, this lone area is not sufficient to conserve the species. Therefore, sites not known to be occupied at the time of listing have also been designated as critical habitat. Three units/subunits (Unit 4, subunit A; Unit 5, subunit A; and Unit 7) are currently occupied by the dusky gopher frog, but were discovered or established subsequent to the listing of the species. Eleven units/subunits, not known to be occupied at the time of listing but within the historic range of the species, are also currently unoccupied. The inclusion of these eleven areas will provide habitat for population translocation and support recovery efforts for the

dusky gopher frog. One of the unoccupied units (Unit 1) represents an historic record for the dusky gopher frog. The historic occupancy status of the other 10 units/subunits is unknown. All 14 units/subunits not known to be occupied at the time of listing have been designated as critical habitat because the Service has determined they are essential for the conservation of the species. The dusky gopher frog is at high risk of extirpation from stochastic events, such as disease or drought, and from demographic factors such as inbreeding depression. The establishment of additional populations beyond the single site known to be occupied at listing is critical to protect the species from extinction and provide for the species' eventual recovery.

We have determined that, with proper protection and management, the areas we are designating as critical habitat are essential for the conservation of the species based on our current understanding of the species' requirements. However, as discussed in the **Critical Habitat** section above, we recognize that designation of critical habitat may not include all habitat areas that we may eventually determine are necessary for the recovery of the species and that, for this reason, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not promote the recovery of the species.

We delineated the critical habitat unit boundaries using the following steps:

- (1) We used digital aerial photography using ArcMap 9.3.1 to map
  - (a) the specific location of the breeding site occupied by the dusky gopher frog at

the time of listing, and

(b) those locations of breeding sites outside the geographic area occupied by the species at the time it was listed, that are currently occupied and not occupied, that were determined to be essential for the conservation of the species;

(2) We delineated critical habitat units by buffering the above locations by a radius of 621 m (2,037 ft). We believe the area created will protect the majority of a dusky gopher frog population's breeding and upland habitat and incorporate all primary constituent elements within the critical habitat unit. We chose the value of 621 m (2,037 ft) by using the median farthest distance movement (571 m (1,873 ft)) from data collected during multiple studies of the gopher frog group (see "*Space for Individual and Population Growth and for Normal Behavior*") and adding 50 m (164 ft) to this distance to minimize the edge effects of the surrounding land use (see discussion in Semlitsch and Bodie 2003, pp. 1222–1223);

(3) We used aerial imagery and ArcMap to connect critical habitat areas within 1,000 m (3,281 ft) of each other to create routes for gene flow between breeding sites and metapopulation structure (see "*Space for Individual and Population Growth and for Normal Behavior*").

When determining critical habitat boundaries within this final rule, we made every effort to avoid including developed areas, such as lands covered by buildings, pavement, and other structures, because such lands lack physical or biological features

for the dusky gopher frog. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this final rule have been excluded by text in the rule and are not designated as critical habitat. Therefore, a Federal action involving these lands will not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat.

We are designating as critical habitat twelve units, three of which are divided into two subunits each, based on sufficient elements of physical or biological features present to support dusky gopher frog life processes. Some units/subunits contain all of the identified elements of physical or biological features and support multiple life processes. Other units contain only some elements of the physical or biological features necessary to support the dusky gopher frog's particular use of that habitat.

### **Final Critical Habitat Designation**

We are designating 15 units/subunits as critical habitat for the dusky gopher frog. The critical habitat areas described below constitute our current best assessment at this time of areas that meet the definition of critical habitat. Table 1 below shows the specific occupancy status of each unit/subunit at the time of listing and currently, based on the most recent data available.



TABLE 1. Occupancy of dusky gopher frog by designated critical habitat units.

<b>Unit</b>	<b>Parish/County</b>	<b>Occupied at the time of listing, Currently occupied</b>	<b>Not occupied at the time of listing, Currently occupied</b>	<b>Not occupied at the time of listing, Currently unoccupied</b>
LOUISIANA				
1	St. Tammany			X
MISSISSIPPI				
2, Subunit A	Harrison	X		
2, Subunit B	Harrison			X
3	Harrison			X
4, Subunit A	Jackson		X	
4, Subunit B	Jackson			X
5, Subunit A	Jackson		X	
5, Subunit B	Jackson			X
6	Jackson			X
7	Jackson		X	
8	Forrest			X
9	Forrest			X
10	Perry			X
11	Perry			X

12	Perry			X
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Table 2 provides the approximate area and ownership of each critical habitat unit. Hectare and acre values were individually computer-generated using GIS software, rounded to nearest whole number, and then summed.

TABLE 2. Designated critical habitat units for dusky gopher frog by land ownership. [Area estimates (hectares (ha) and acres (ac)) reflect all land within critical habitat unit boundaries.]

Unit	Parish/County	Ownership			Total Area
		Federal	State	Private	
LOUISIANA					
1	St. Tammany			625 ha (1,544 ac)	625 ha (1,544 ac)
MISSISSIPPI					
2, Subunit A	Harrison	100 ha (247 ac)		21 ha (52 ac)	121 ha (299 ac)
2, Subunit B	Harrison	425 ha (1,050 ac)		3 ha (7 ac)	428 ha (1,057 ac)
3	Harrison	121 ha (299 ac)			121 ha (299 ac)

4, Subunit A	Jackson			121 ha (299 ac)	121 ha (299 ac)
4, Subunit B	Jackson	48 ha (119 ac)		109 ha (269 ac)	157 ha (388 ac)
5, Subunit A	Jackson			121 ha (299 ac)	121 ha (299 ac)
5, Subunit B	Jackson			54 ha (133 ac)	54 ha (133 ac)
6	Jackson	121 ha (299 ac)			121 ha (299 ac)
7	Jackson		107 ha (264 ac)	14 ha (35 ac)	121 ha (299 ac)
8	Forrest	121 ha (299 ac)			121 ha (299 ac)
9	Forrest	120 ha (297 ac)		1 ha (2.5 ac)	121 ha (299 ac)
10	Perry	127 ha (314 ac)		20 ha (49 ac)	147 ha (363 ac)
11	Perry	119 ha (294 ac)		2 ha (5 ac)	121 ha (299 ac)
12	Perry	115 ha (284 ac)		6 ha (15 ac)	121 ha (299 ac)
Total	All Parishes	1,417 ha	107 ha	1,097 ha	2,621 ha

	and Counties	(3,501 ac)	(264 ac)	(2,711 ac)	(6,477 ac)
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Note: Area sizes may not sum due to rounding.

We present below brief descriptions of all units and reasons why they meet the definition of critical habitat for the dusky gopher frog.

*Unit 1: St. Tammany Parish, Louisiana*

Unit 1 encompasses 625 ha (1,544 ac) on private lands managed for industrial forestry in St. Tammany Parish, Louisiana. This unit is located north and south of State Hwy. 36, approximately 3.1 km (1.9 mi) west of State Hwy. 41 and the town of Hickory, Louisiana. Unit 1 is not within the geographic area occupied by the species at the time of listing. It is currently unoccupied; however, the last observation of a dusky gopher frog in Louisiana was in 1965 in one of the ponds within this unit.

Unit 1 consists of five ponds (ephemeral wetland habitat) and their associated uplands. If dusky gopher frogs are translocated to the site, the five ponds are in close enough proximity to each other that adult frogs could move between them and create a metapopulation, which increases the chances of the long-term survival of the population. Although the uplands associated with the ponds do not currently contain the essential physical or biological features of critical habitat, we believe them to be restorable with reasonable effort. Due to the low number of remaining populations and severely restricted range of the dusky gopher frog, the species is at high risk of extirpation from stochastic events, such as disease or drought. Maintaining the five ponds within this area

as suitable habitat into which dusky gopher frogs could be translocated is essential to decrease the risk of extinction of the species resulting from stochastic events and provide for the species' eventual recovery. Therefore, we have determined this unit is essential for the conservation of the species because it provides important breeding sites for recovery. It includes habitat for population expansion outside of the core population areas in Mississippi, a necessary component of recovery efforts for the dusky gopher frog.

#### *Unit 2: Harrison County, Mississippi*

Unit 2 comprises two subunits encompassing 549 ha (1,356 ac) on Federal and private lands in Harrison County, Mississippi. This unit, between U.S. Hwy. 49 and Old Hwy. 67, is approximately 224 m (735 ft) northeast of the Biloxi River. It is located approximately 2.8 km (1.8 mi) east of U.S. Hwy. 49 and approximately 2.3 km (1.4 mi) west of Old Hwy. 67. Within this unit, approximately 525 ha (1,297 ac) are in the DNF and 24 ha (59 ac) are in private ownership.

#### Subunit A

Unit 2, Subunit A encompasses 121 ha (299 ac) around the only breeding pond (Glen's Pond) known for the dusky gopher frog when it was listed in 2001; as a result, it is within the geographic area of the species occupied at the time of listing. In addition, this subunit contains all elements of the essential physical or biological features of the

species. The majority of this subunit (100 ha (247 ac)) is in the DNF, with the remainder (21 ha (52 ac)) in private ownership. This subunit is being designated as critical habitat because it was occupied at the time of listing, is currently occupied, and contains sufficient primary constituent elements (ephemeral wetland habitat (PCE 1), upland forested nonbreeding habitat (PCE 2), and upland connectivity habitat (PCE 3) to support life-history functions essential to the conservation of the species.

Glen's Pond and the habitat surrounding it, consisting of forested uplands used as nonbreeding habitat and upland connectivity habitat between breeding and nonbreeding habitat, support the majority of the dusky gopher frogs that currently exist in the wild. Within Unit 2, Subunit A, the dusky gopher frog and its habitat may require special management considerations or protection to address potential adverse effects caused by: Fire suppression and low fire frequencies; detrimental alterations in forestry practices that could destroy belowground soil structures, such as stump removal; hydrologic changes resulting from ditches, and/or adjacent highways and roads that could alter the ecology of the breeding pond and surrounding terrestrial habitat; wetland degradation; random effects of drought or floods; off-road vehicle use; gas, water, electrical power, and sewer easements; and agricultural and urban development.

#### Subunit B

Unit 2, Subunit B encompasses 428 ha (1,057 ac) adjacent to Subunit A and the area surrounding Glen's Pond. The majority of this subunit (425 ha (1,050 ac)) is in the

DNF, with the remainder (3 ha (7 ac)) in private ownership. This subunit is not within the geographic area of the species occupied at the time of listing and is currently unoccupied. However, we believe this subunit is essential for the conservation of the dusky gopher frog because it consists of areas, within the dispersal range of the dusky gopher frog (from Subunit A), which we believe provide important breeding sites for recovery and metapopulation structure that will protect the dusky gopher frog from extinction. This unoccupied area consists of three ponds and their associated uplands in the DNF. These ponds were named Reserve Pond, Pony Ranch Pond, and New Pond during our ongoing recovery initiatives. The USFS is actively managing this area to benefit the recovery of the dusky gopher frog. Due to the low number of remaining populations and the severely restricted range of the dusky gopher frog, the species is at high risk of extirpation from stochastic events, such as disease or drought. Maintaining this area as suitable habitat into which dusky gopher frogs could be translocated is essential to decrease the risk of extinction of the species resulting from stochastic events and provide for the species' eventual recovery.

### *Unit 3: Harrison County, Mississippi*

Unit 3 encompasses 121 ha (299 ac) on Federal land in Harrison County, Mississippi. This unit is located in the DNF approximately 7.9 km (4.9 mi) east of the community of Success at Old Hwy. 67 and 4 km (2.5 mi) south of Bethel Road.

Unit 3 is not within the geographic range of the species occupied at the time of

listing and is currently unoccupied. This area surrounds a pond on the DNF that was given the name of Carr Bridge Road Pond during ongoing recovery initiatives when it was selected as a dusky gopher frog translocation site. The USFS is actively managing this area to benefit the recovery of the dusky gopher frog. Due to the low number of remaining populations and severely restricted range of the dusky gopher frog, the species may be at risk of extirpation from stochastic events, such as disease or drought. Maintaining this area as suitable habitat into which dusky gopher frogs could be translocated is essential to decrease the potential risk of extinction of the species resulting from stochastic events and to provide for the species' eventual recovery. Therefore, this unit is being designated as critical habitat because it is essential for the conservation of the species.

#### *Unit 4: Jackson County, Mississippi*

Unit 4 encompasses 278 ha (687 ac) on Federal and private land in Jackson County, Mississippi. This unit borders the north side of Interstate 10 approximately 1.1 km (0.7 mi) west of State Hwy. 57. Within this unit, approximately 48 ha (119 ac) are in the Mississippi Sandhill Crane National Wildlife Refuge and 230 ha (568 ac) are in private ownership.

#### Subunit A

Unit 4, Subunit A encompasses 121 ha (299 ac) on private land. It is currently



occupied as a result of translocation efforts conducted in 2004, 2005, 2007, 2008, 2009, and 2010; however, it was not occupied at the time of listing. We believe this subunit is essential for the conservation of the dusky gopher frog because of the presence of a proven breeding pond (egg masses have been deposited here in 2007 and 2010 by gopher frogs translocated to the site) and its associated uplands (upland forested nonbreeding habitat and upland connectivity habitat). We also believe that metapopulation structure, which will further protect the dusky gopher frog from extinction, is possible when the whole area of Unit 4 is considered. The private owners of this property are actively managing this area to benefit the recovery of the dusky gopher frog. Due to the low number of remaining populations and severely restricted range of the dusky gopher frog, the species may be at high risk of extirpation from stochastic events, such as disease or drought. Maintaining this area as suitable habitat into which dusky gopher frogs can continue to be translocated is essential to decrease the risk of extinction of the species resulting from stochastic events and provide for the species' eventual recovery.

#### Subunit B

Unit 4, Subunit B encompasses 157 ha (388 ac) on Federal and private land adjacent to Subunit A. The majority of this subunit (109 ha (269 ac)) is on private land, with the remainder of the unit (48 ha (119 ac)) in the Mississippi Sandhill Crane National Wildlife Refuge. This subunit is not within the geographic area of the species occupied at the time of listing and is currently unoccupied. However, we believe this subunit is essential for the conservation of the dusky gopher frog because it consists of an area,

within the dispersal range of the dusky gopher frog (from Subunit A), which provides two important breeding sites and their associated upland for recovery and metapopulation structure that will protect the dusky gopher frog from extinction. This area is actively managed to benefit the recovery of the dusky gopher frog. Due to the low number of remaining populations and severely restricted range of the dusky gopher frog, the species may be at risk of extirpation from stochastic events, such as disease or drought. Maintaining this area as suitable habitat is essential to decrease the potential risk of extinction of the species and provide for the species' eventual recovery.

#### *Unit 5: Jackson County, Mississippi*

Unit 5 encompasses 175 ha (432 ac) on private land in Jackson County, Mississippi. This unit is located approximately 10.6 km (6.6 mi) north of Interstate 10. It is 124 m (407 ft) north of Jim Ramsey Road and 5.7 km (3.6 mi) west of the community of Vancleave located near State Hwy. 57.

#### Subunit A

Unit 5, Subunit A encompasses 121 ha (299 ac) on private land. It is currently occupied, but was not known to be occupied at the time of listing. This subunit contains a breeding site where dusky gopher frogs were discovered in 2004, subsequent to the listing of the dusky gopher frog.

We believe this subunit is essential for the conservation of the dusky gopher frog because of the presence of a proven breeding pond, named Mike's Pond (ephemeral wetland habitat), and its associated uplands (upland forested nonbreeding habitat and upland connectivity habitat). We also believe that metapopulation structure, which will further protect the dusky gopher frog from extinction, is possible when the whole area of Unit 5 is considered. The owners of this property are actively managing this area to benefit the recovery of the dusky gopher frog. Due to the low number of remaining populations and severely restricted range of the dusky gopher frog, the species may be at high risk of extirpation from stochastic events, such as disease or drought. Maintaining this area as suitable habitat is essential to decrease the risk of extinction of the species resulting from stochastic events and provide for the species' eventual recovery.

#### Subunit B

Unit 5, Subunit B encompasses 54 ha (133 ac) on private land adjacent to Subunit A. This subunit is not within the geographic area of the species occupied at the time of listing and is currently unoccupied. However, we believe this subunit is essential for the conservation of the dusky gopher frog because it consists of an area, within the dispersal range of the dusky gopher frog (from Subunit A), which provides an important breeding site and associated forested uplands for recovery and metapopulation structure that will protect the dusky gopher frog from extinction. This unoccupied area consists of a single pond and its associated uplands. This area is actively managed to benefit the recovery of the dusky gopher frog. Due to the low number of remaining populations and severely

restricted range of the dusky gopher frog, the species may be at risk of extirpation from stochastic events, such as disease or drought. Maintaining this area as suitable habitat is essential to decrease the potential risk of extinction of the species and provide for the species' eventual recovery.

*Unit 6: Jackson County, Mississippi*

Unit 6 encompasses 121 ha (299 ac) on Federal land in Jackson County, Mississippi. This unit is located on the Ward Bayou Wildlife Management Area (WMA) approximately 4.8 km (3 mi) northeast of State Hwy. 57 and the community of Vancleave. This land is owned by the U.S. Army Corps of Engineers (Corps) and managed by the Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) to benefit the recovery of the dusky gopher frog.

Unit 6 is not within the geographic range of the species occupied at the time of listing and is currently unoccupied. This area consists of a pond and its associated uplands on the WMA and has been given the name of Mayhaw Pond during ongoing recovery initiatives. We believe this area is essential for the conservation of the dusky gopher frog because it provides an important breeding site and associated forested uplands for recovery. Due to the low number of remaining populations and severely restricted range of the dusky gopher frog, the species may be at risk of extirpation from stochastic events, such as disease or drought. Maintaining this area of suitable habitat, into which dusky gopher frogs could be translocated, is essential to decrease the potential

risk of extinction of the species and provide for the species' eventual recovery.

*Unit 7: Jackson County, Mississippi*

Unit 7 encompasses 121 ha (299 ac) on State and private land in Jackson County, Mississippi. This unit is located approximately 4.2 km (2.6 mi) east of the intersection of State Hwy. 63 and State Hwy. 613; it is 3.8 km (2.4 mi) west of the Escatawpa River, and 3.2 km (2 mi) northeast of Helena, Mississippi. The portion of this unit in State ownership (107 ha (264 ac)) is 16th section land held in trust by the State of Mississippi as a local funding source for public education in Jackson County. The Jackson County School board has jurisdiction and control of the land. The balance of this unit is on private land (14 ha (35 ac)).

Unit 7 is currently occupied, but was not known to be occupied at the time of listing. The area, discovered in 2004 subsequent to the listing of the dusky gopher frog, contains a breeding pond named McCoy's Pond and associated uplands. We believe this area is essential for the conservation of the species because it provides an important breeding site and associated forested uplands for recovery of the dusky gopher frog. Currently, the State-owned portion of the area is managed for timber production by the Mississippi Forestry Commission for the Jackson County School Board. Due to the low number of remaining populations and severely restricted range of the dusky gopher frog, it may be at high risk of extirpation from stochastic events, such as disease or drought. Maintaining this area of currently occupied habitat for dusky gopher frogs is essential to

decrease the risk of extinction of the species and provide for the species' eventual recovery.

*Unit 8: Forrest County, Mississippi*

Unit 8 encompasses 121 ha (299 ac) on Federal land in Forrest County, Mississippi. This unit is located in the DNF approximately 1.9 km (1.2 mi) east of U.S. Hwy. 49, approximately 1.7 km (1.1 mi) south of Black Creek, and approximately 3.1 km (1.9 mi) southeast of the community of Brooklyn, Mississippi.

Unit 8 is not within the geographic range of the species occupied at the time of listing and is currently unoccupied. This area consists of a pond and associated uplands that have been selected as a future dusky gopher frog translocation site during ongoing recovery initiatives. We believe this area is essential for the conservation of the species because it provides an important breeding site and associated forested uplands for recovery of the dusky gopher frog.

Unit 8 is being actively managed by the USFS to benefit the recovery of the dusky gopher frog. Due to the low number of remaining populations and severely restricted range of the dusky gopher frog, the species may be at risk of extirpation from stochastic events, such as disease or drought. Maintaining this area as suitable habitat, into which dusky gopher frogs could be translocated, is essential to decrease the potential risk of extinction of the species and provide for the species' eventual recovery.

*Unit 9: Forrest County, Mississippi*

Unit 9 encompasses 121 ha (299 ac) on Federal land and private land in Forrest County, Mississippi. The majority of this unit (120 ha (297 ac)) is located in the DNF and the balance (1 ha (2.5 ac)) on private land. This unit is located approximately 3.9 km (2.4 mi) east of U.S. Hwy. 49, approximately 4.3 km (2.7 mi) south of Black Creek, and approximately 6.1 km (3.8 mi) southeast of the community of Brooklyn, Mississippi, at the Perry County line.

Unit 9 is not within the geographic range of the species occupied at the time of listing and is currently unoccupied. This area consists of a pond and associated uplands that have been selected as a future dusky gopher frog translocation site during ongoing recovery initiatives. We believe this area is essential for the conservation of the species because it provides an important breeding site and associated forested uplands for recovery of the dusky gopher frog.

Most of Unit 9 is being actively managed by the USFS to benefit the recovery of the dusky gopher frog. Due to the low number of remaining populations and severely restricted range of the dusky gopher frog, the species may be at risk of extirpation from stochastic events, such as disease or drought. Maintaining this area as suitable habitat, into which dusky gopher frogs could be translocated, is essential to decrease the potential risk of extinction of the species and provide for the species' eventual recovery.

*Unit 10: Perry County, Mississippi*

Unit 10 encompasses 147 ha (363 ac) on Federal land and private land in Perry County, Mississippi. The majority of this unit (127 ha (314 ac)) is located in the DNF and the balance (20 ha (49 ac)) is located on private land. This unit is located at the intersection of Benndale Road and Mars Hill Road, approximately 2.6 km (1.6 mi) northwest of the intersection of the Perry County, Stone County, and George County lines and approximately 7.2 km (4.5 mi) north of State Hwy. 26.

Unit 10 is not within the geographic range of the species occupied at the time of listing and is currently unoccupied. This area consists of two ponds and their associated uplands that have been selected as future dusky gopher frog translocation sites during ongoing recovery initiatives. It provides the habitat for establishing new breeding ponds and metapopulation structure that will protect the dusky gopher frog from extinction. We believe this area is essential for the conservation of the dusky gopher frog because it provides two important breeding sites and their associated forested uplands for recovery of the dusky gopher frog.

Most of Unit 10 is being actively managed by the USFS to benefit the recovery of the dusky gopher frog. Due to the low number of remaining populations and severely restricted range of the dusky gopher frog, the species may be at high risk of extirpation from stochastic events, such as disease or drought. Maintaining this area as suitable



habitat, into which dusky gopher frogs could be translocated, is essential to decrease the risk of extinction of the species and provide for the species' eventual recovery.

*Unit 11: Perry County, Mississippi*

Unit 11 encompasses 121 ha (299 ac) on Federal land and private land in Perry County, Mississippi. The majority of this unit (119 ha (294 ac)) is located in the DNF and the balance (2 ha (5 ac)) is located on private land. This unit borders the north side of Benndale Road northeast of the intersection of the Perry County, Stone County, and George County lines, approximately 6.4 km (4 mi) north of State Hwy. 26.

Unit 11 is not within the geographic range of the species occupied at the time of listing and is currently unoccupied. This area consists of a pond and associated uplands that have been selected as a future dusky gopher frog translocation site during ongoing recovery initiatives. We believe this area is essential for the conservation of the gopher dusky frog because it provides an important breeding site and associated forested uplands for recovery of the dusky gopher frog.

Most of Unit 11 is being actively managed by the USFS to benefit the recovery of the dusky gopher frog. Due to the low number of remaining populations and severely restricted range of the dusky gopher frog, the species may be at risk of extirpation from stochastic events, such as disease or drought. Maintaining this area as suitable habitat, into which dusky gopher frogs could be translocated, is essential to decrease the potential

risk of extinction of the species and provide for the species' eventual recovery.

*Unit 12: Perry County, Mississippi*

Unit 12 encompasses 121 ha (299 ac) on Federal land and private land in Perry County, Mississippi. The majority of this unit (115 ha (284 ac)) is located in the DNF and the remaining balance (6 ha (15 ac)) is located on private land. This unit is located approximately 1.2 km (0.75 mi) east of Mars Hill Road, approximately 3.9 km (2.4 mi) north of the intersection of the Perry County, Stone County, and George County lines, and approximately 10.2 km (6.4 mi) north of State Hwy. 26.

Unit 12 is not within the geographic range of the species occupied at the time of listing and is currently unoccupied. This area consists of a pond and its associated uplands that have been selected as a future dusky gopher frog translocation site during ongoing recovery initiatives. We believe this area is essential for the conservation of the dusky gopher frog because it provides an important breeding site and associated forested uplands for recovery of the dusky gopher frog.

Most of Unit 12 is being actively managed by the USFS to benefit the recovery of the dusky gopher frog. Due to the low number of remaining populations and severely restricted range of the dusky gopher frog, the species may be at risk of extirpation from stochastic events such as disease or drought. Maintaining this area as suitable habitat into which dusky gopher frogs could be translocated is essential to decrease the potential risk

of extinction of the species and provide for the species' eventual recovery.

## **Effects of Critical Habitat Designation**

### *Section 7 Consultation*

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

Decisions by the 5<sup>th</sup> and 9<sup>th</sup> Circuit Courts of Appeals have invalidated our definition of “destruction or adverse modification” (50 CFR 402.02) (see *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004) and *Sierra Club v. U.S. Fish and Wildlife Service*, 245 F.3d 434, 442 (5th Cir. 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended

conservation role for the species.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, tribal, local, or private lands that require a Federal permit (such as a permit from the Corps under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local or private lands that are not federally funded or authorized, do not require section 7 consultation.

As a result of section 7 consultation, we document compliance with the requirements of section 7(a)(2) through our issuance of:

- (1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or
- (2) A biological opinion for Federal actions that may affect, or are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are

identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define “reasonable and prudent alternatives” (at 50 CFR 402.02) as alternative actions identified during consultation that:

- (1) Can be implemented in a manner consistent with the intended purpose of the action,
- (2) Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction,
- (3) Are economically and technologically feasible, and
- (4) Would, in the Director’s opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency’s discretionary involvement or control is authorized by law). Consequently, Federal agencies may need to request reinitiation of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement

or control may affect subsequently listed species or designated critical habitat.

*Application of the “Adverse Modification” Standard*

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that alter the physical and biological features to an extent that appreciably reduces the conservation value of critical habitat for the dusky gopher frog. As discussed above, the role of critical habitat is to support life-history needs of the species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation.

Activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result in consultation for the dusky gopher frog. These activities include, but are not limited to:

(1) Actions that would alter the hydrology or water quality of dusky gopher frog wetland habitats. Such activities could include, but are not limited to, discharge of fill

material; release of chemicals and/or biological pollutants; clearcutting, draining, ditching, grading, or bedding; diversion or alteration of surface or ground water flow into or out of a wetland (i.e., due to roads, fire breaks, impoundments, discharge pipes, etc.); discharge or dumping of toxic chemicals, silt, or other pollutants (i.e., sewage, oil, pesticides, and gasoline); and use of vehicles within wetlands. These activities could destroy dusky gopher frog breeding sites; reduce hydroperiod below what is necessary for successful larval metamorphosis; and/or eliminate or reduce the habitat necessary for the growth and reproduction, and affect the prey base, of the dusky gopher frog.

(2) Forestry management actions in pine habitat that would significantly alter the suitability of dusky gopher frog terrestrial habitat. Such activities could include, but are not limited to, conversion of timber land to another use and timber management, including clearcutting, site preparation involving ground disturbance, prescribed burning, and unlawful pesticide application. These activities could destroy or alter the uplands necessary for the growth and development of juvenile and adult dusky gopher frogs.

(3) Actions that would significantly fragment and isolate dusky gopher frog wetland and upland habitats from each other. Such activities could include, but are not limited to, constructing new structures or new roads and converting forested habitat to other uses. These activities could limit or prevent the dispersal of dusky gopher frogs from breeding sites to upland habitat or vice versa due to obstructions to movement caused by structures, certain types of curbs, increased traffic density, or inhospitable habitat.

## **Exemptions**

### *Application of Section 4(a)(3) of the Act*

The Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an integrated natural resources management plan (INRMP) by November 17, 2001. An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found on the base.

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) now provides: “The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense (DOD), or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.”

There are no DOD lands with a completed INRMP within the critical habitat designation. Therefore, we are not exempting any lands owned or managed by the DOD



from this designation of critical habitat for the dusky gopher frog under section 4(a)(3)(B)(i) of the Act.

## **Exclusions**

### *Application of Section 4(b)(2) of the Act*

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. The statute on its face, as well as the legislative history, is clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor in making that determination.

Under section 4(b)(2) of the Act, the Secretary may exclude an area from designated critical habitat based on economic impacts, impacts on national security, or any other relevant impacts. In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate whether the benefits of

exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise his discretion to exclude the area only if such exclusion will not result in the extinction of the species.

## Economic Impacts

Under section 4(b)(2) of the Act, we consider the economic impacts of specifying any particular area as critical habitat. In order to consider economic impacts, we prepared a draft economic analysis of the proposed critical habitat designation and related factors (Industrial Economics 2011, pp. 1-87). The draft analysis, dated August 17, 2011, was made available for public comment from September 27, 2011, through November 28, 2011 (76 FR 59774, 77 FR 2254) and again from January 17, 2012 through March 2, 2012 (77 FR 2254). Following the close of the comment periods, a final analysis ((FEA) dated April 6, 2012) of the potential economic effects of the designation was developed taking into consideration the public comments and any new information (Industrial Economics 2012, entire).

The intent of the FEA is to quantify the economic impacts of all potential conservation efforts for the dusky gopher frog; some of these costs will likely be incurred regardless of whether we designate critical habitat (baseline). The economic impact of the final critical habitat designation is analyzed by comparing scenarios both “with critical habitat” and “without critical habitat.” The “without critical habitat” scenario represents the baseline for the analysis, considering protections already in place for the

species (e.g., under the Federal listing and other Federal, State, and local regulations).

The baseline, therefore, represents the costs incurred regardless of whether critical habitat is designated. The “with critical habitat” scenario describes the incremental impacts associated specifically with the designation of critical habitat for the species. The incremental conservation efforts and associated economic impacts are those not expected to occur absent the designation of critical habitat for the species. In other words, the incremental costs are those attributable solely to the designation of critical habitat above and beyond the baseline costs; these are the costs we consider in the final designation of critical habitat. The analysis looks retrospectively at baseline impacts incurred since the species was listed, and forecasts both baseline and incremental impacts likely to occur with the designation of critical habitat.

The FEA also addresses how potential economic impacts are likely to be distributed, including an assessment of any local or regional impacts of habitat conservation and the potential effects of conservation activities on government agencies, private businesses, and individuals. The FEA measures lost economic efficiency associated with residential and commercial development and public projects and activities, such as economic impacts on water management and transportation projects, Federal lands, small entities, and the energy industry. Decision makers can use this information to assess whether the effects of the designation might unduly burden a particular group or economic sector. Finally, the FEA looks retrospectively at baseline costs that have been incurred since 2001 (year of the species’ listing) (66 FR 62993), and uses this information to inform the economic analysis which quantifies those costs that

may occur in the 20 years following the designation of critical habitat, which was determined to be the appropriate period for analysis because limited planning information was available for most activities to forecast activity levels for projects beyond a 20-year timeframe.

The FEA quantifies economic impacts of dusky gopher frog conservation efforts associated with the following categories of activity: Active species management, residential and commercial development, timber management, and military activities. The FEA estimates present value incremental impacts of critical habitat designation of \$102,000, \$20.5 million, or \$34.0 million according to three scenarios (applying a 7 percent discount rate). This equates to \$9,610, \$1.93 million, and \$3.21 million in annualized impacts (applying a 7 percent discount rate). This approach was taken because most of the estimated incremental impacts are related to possible lost development value in Unit 1; considerable uncertainty exists regarding the likelihood of a Federal nexus for development activities there; and potential exists for the Service to recommend conservation measures if consultation were to occur.

Under scenario 1, development occurring in Unit 1 avoids impacts to jurisdictional wetlands and as such, there is no Federal nexus (no Federal permit is required) triggering section 7 consultation regarding dusky gopher frog critical habitat. Absent consultation, no conservation measures are implemented for the species, and critical habitat designation of Unit 1 does not result in any incremental economic impact. Therefore, all incremental economic costs will be attributed to the administrative costs of

future section 7 consultations in all other units. Total present value of incremental impacts of critical habitat designation of the remaining units are \$102,000 (\$9,610 in annualized impacts) over the timeframe of the analysis (2012 to 2031), applying a 7 percent discount rate.

According to scenarios 2 and 3, the vast majority of the incremental impacts would stem from the lost development value of land in Unit 1. Under scenarios 2 and 3, less than one percent of the incremental impacts stem from the administrative costs of future section 7 consultations. Under scenario 2, the analysis assumes the proposed development of Unit 1 requires a Section 404 permit from the Corps due to the presence of jurisdictional wetlands. The development would therefore be subject to section 7 consultation considering critical habitat for the dusky gopher frog. This scenario further assumes that the Service works with the landowner to establish conservation areas for the dusky gopher frog within the unit. The Service anticipates that approximately 40 percent of the unit may be developed and 60 percent is managed for dusky gopher frog conservation and recovery. According to this scenario, present value incremental impacts of critical habitat designation due to the lost option for developing 60 percent of Unit 1 lands are \$20.4 million. Total present value incremental impacts of critical habitat designation across all units are therefore \$20.5 million (\$1.93 million in annualized impacts), applying a 7 percent discount rate.

Scenario 3 again assumes that the proposed development of Unit 1 requires a Section 404 permit and therefore is subject to section 7 consultation. This scenario further assumes that, due to the importance of the unit in the conservation and recovery of

the species, the Service recommends that no development occur within the unit.

According to this scenario, present value impacts of the lost option for development in 100 percent of the unit are \$33.9 million. Total present value incremental impacts of critical habitat designation across all units are therefore \$34.0 million (\$3.21 million in annualized impacts), applying a 7 percent discount rate.

The FEA also discusses the potential economic benefits associated with the designation of critical habitat. However, because the Service believes that the direct benefits of the designation are best expressed in biological terms, this analysis does not quantify or monetize benefits; only a qualitative discussion of economic benefits is provided.

Our economic analysis did not identify any disproportionate costs that are likely to result from the designation. Consequently, the Secretary is not exercising his discretion to exclude any areas from this designation of critical habitat for the dusky gopher frog based on economic impacts.

A copy of the FEA with supporting documents may be obtained by contacting the Mississippi Ecological Services Field Office (see **ADDRESSES**) or by downloading from the Internet at *<http://www.regulations.gov>*.

National Security Impacts

Under section 4(b)(2) of the Act, we consider whether there are lands owned or managed by the DOD where a national security impact might exist. The Mississippi Army National Guard (MANG) conducts training in an area of the DNF where Units 10, 11, and 12 are located and has requested exclusion under section 4(b)(2) due to significant impacts to national security. The current training is authorized by a Special Use Permit with the USFS. The lands covered by the permit are part of the Leaf River WMA, which is open to the public for hunting and other recreational activities. The USFS manages the Leaf River WMA for timber production and as part of a habitat management area (HMA) to support recovery efforts for the red-cockaded woodpecker. As a result of the HMA, there are existing limitations to training activities in this area. Permitted use by the military includes driving military vehicles on existing roads bivouacking or orienteering in the forested areas. No live ammunition is used in the area, and wetlands are excluded from military use. In preparing this final rule, we have determined that lands within the designation of critical habitat for the dusky gopher frog are not owned or managed by DOD (*See* Comment 19 for further information). Consequently, the Secretary is not exercising his discretion to exclude any areas from this final designation based on impacts to national security.

#### Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors, including whether the landowners have developed any HCPs or other

management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at any tribal issues, and consider the government-to-government relationship of the United States with tribal entities. We also consider any social impacts that might occur because of the designation.

In preparing this final rule, we have determined that there are currently no HCPs or other management plans for the dusky gopher frog, and this final designation does not include any tribal lands or trust resources. We anticipate no impact on tribal lands, partnerships, or HCPs from this critical habitat designation. Accordingly, the Secretary is not exercising his discretion to exclude any areas from the final designation based on other relevant impacts.

## **Required Determinations**

### *Regulatory Planning and Review (Executive Orders 12866 and 13563)*

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) will review all significant rules. The Office of Information and Regulatory Affairs has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for



achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

*Regulatory Flexibility Act (5 U.S.C. 601 et seq.)*

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 (5 U.S.C. 801 *et seq.*), whenever an agency must publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of an agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities. In this final rule, we are certifying that the critical habitat designation for the dusky gopher frog will not have a significant economic impact on a substantial number of small entities. The following

discussion explains our rationale.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and agricultural businesses with annual sales less than \$750,000. To determine if potential economic impacts on these small entities are significant, we consider the types of activities that might trigger regulatory impacts under this rule, as well as types of project modifications that may result. In general, the term “significant economic impact” is meant to apply to the typical operations of a small business

To determine if the rule could significantly affect a substantial number of small entities, we considered the number of small entities affected within particular types of economic activities, such as timber operations, and residential and commercial development, along with the accompanying infrastructure associated with such projects, including construction of roads, storm water drainage, and bridges and culverts and the maintenance of these structures. We apply the “substantial number” test individually to each industry to determine if certification is appropriate. However, the SBREFA does

not explicitly define “substantial number” or “significant economic impact.”

Consequently, to assess whether a “substantial number” of small entities is affected by this designation, this analysis considers the relative number of small entities likely to be impacted in an area. In some circumstances, especially with critical habitat designations of limited extent, we may aggregate across all industries and consider whether the total number of small entities affected is substantial. In estimating the numbers of small entities potentially affected, we also considered whether their activities have any Federal involvement.

Designation of critical habitat only affects activities authorized, funded, or carried out by Federal agencies. Some kinds of activities are unlikely to have any Federal involvement and so will not be affected by critical habitat designation. In areas where the species is present, Federal agencies already are required to consult with us under section 7 of the Act on activities they authorize, fund, or carry out that may affect the dusky gopher frog. Federal agencies also must consult with us if their activities may affect critical habitat. Designation of critical habitat, therefore, could result in an additional economic impact on small entities due to the requirement to reinitiate consultation for ongoing Federal activities (see *Application of the “Adverse Modification” Standard*).

In our FEA of the critical habitat designation, we evaluated the potential economic effects on small entities resulting from conservation actions related to the listing of the dusky gopher frog and the designation of critical habitat. The analysis is based on the estimated impacts associated with the rulemaking as described in Chapters 1

through 5 and Appendix A of the analysis and evaluates the potential for economic impacts related to: (1) Species management; (2) development; (3) timber management; and (4) military activities.

The FEA indicates that the incremental impacts potentially incurred by small entities are limited to development activities on Tradition Properties in Subunits 2a and 2b (where 59 acres of critical habitat overlap a planning area for a large-scale development), and potential future development within 1,544-acre Unit 1 owned by four small businesses and an individual. Of the 129 small businesses in this sector, there are five small businesses, considered small Land Subdividers, which represent approximately 3.9 percent of the total within the counties containing proposed critical habitat for the dusky gopher frog. At the national scale this percentage is much less. Incremental costs of dusky gopher frog critical habitat to Tradition Properties are anticipated to result in an annualized impact of \$127 (which would represent less than 0.01 percent of Tradition Properties' average annual revenues). Annualized impacts to the four small businesses in Unit 1 were evaluated according to the three scenarios described above in the *Economic Impacts* section. Under Scenario 1, there would be no impact to small businesses. Under scenario 2, an impact of \$1.93 million was calculated, approximately 26.8 percent of annual revenues; under scenario 3, an impact of \$3.21 million was calculated, approximately 44.7 percent of annual revenues.

Our analysis constitutes an evaluation of not only potentially directly affected parties, but those also potentially indirectly affected. Under the RFA and following

recent case law, we are only required to evaluate the direct effects of a regulation to determine compliance. As the regulatory effect of critical habitat is through section 7 of the Act, which applies only to Federal agencies, we have determined that only Federal agencies are directly affected by this rulemaking. Other entities, such as small businesses, are only indirectly affected. However, to better understand the potential effects of a designation of critical habitat, we frequently evaluate the potential impact to those entities that may be indirectly affected, as was the case for this rulemaking. In doing so, we focus on the specific areas being designated as critical habitat and compare the number of small business entities potentially affected in that area with other small business entities in the regional area, versus comparing the entities in the area of designation with entities nationally—which is more commonly done. This results in a estimation of a higher proportion of small businesses potentially affected. In this rulemaking, we calculate that the proportion of small businesses potentially affected is 3.9 percent of those regionally. If we were to calculate that value based on the proportion nationally, then our estimate would be significantly lower than 1 percent.

Following our evaluation of potential effects to small business entities from this rulemaking, we do not believe that the five small businesses, representing 3.9 percent of the small businesses in the affected sector, constitutes a substantial number. However, we recognize that the potential effects to these small businesses under Scenarios 2 and 3 may be significant, but still would not represent a substantial number of affected entities in the sector nationally.

In summary, we considered whether this designation will result in a significant economic impact on a substantial number of small entities. Based on the above reasoning and currently available information, we concluded that this rule will not result in a significant economic impact on a substantial number of small business entities. Therefore, we are certifying that the designation of critical habitat for the dusky gopher frog will not have a significant economic impact on a substantial number of small entities, and a regulatory flexibility analysis is not required.

*Energy Supply, Distribution, or Use—Executive Order 13211*

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. OMB has provided guidance for implementing this Executive Order that outlines nine outcomes that may constitute “a significant adverse effect” when compared to not taking the regulatory action under consideration:

- Reductions in crude oil supply in excess of 10,000 barrels per day;
- Reductions in fuel production in excess of 4,000 barrels per day;
- Reductions in coal production in excess of 5 million tons per year;
- Reductions in natural gas production in excess of 25 million thousand cubic feet per year;

- Reductions in electricity production in excess of 1 billion kilowatt-hours per year or in excess of 500 megawatts of installed capacity;
- Increases in energy use required by the regulatory action that exceed the thresholds above;
- Increases in the cost of energy production in excess of one percent;
- Increases in the cost of energy distribution in excess of one percent; or
- Other similarly adverse outcomes.

While the landowner of Unit 1 has expressed interest in developing the land for oil and gas, the Service does not anticipate critical habitat designation will result in the complete loss of oil and gas development in Unit 1. In addition, the level and timing of such development is significantly uncertain regardless, as no oil and gas development has occurred within the region to date. Consequently, this analysis does not anticipate the rule will affect the production, distribution, or use of energy according to the above criteria. Thus, based on information in the economic analysis, no energy-related impacts associated with dusky gopher frog conservation activities within critical habitat are expected. As such, the designation of critical habitat is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

*Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)*

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*),

we make the following findings:

(1) This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or Tribal governments, or the private sector, and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.” These terms are defined in 2 U.S.C. 658(5)–(7). “Federal intergovernmental mandate” includes a regulation that “would impose an enforceable duty upon State, local, or tribal governments,” with two exceptions. It excludes “a condition of Federal assistance.” It also excludes “a duty arising from participation in a voluntary Federal program,” unless the regulation “relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority,” if the provision would “increase the stringency of conditions of assistance” or “place caps upon, or otherwise decrease, the Federal Government’s responsibility to provide funding,” and the State, local, or tribal governments “lack authority” to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid for Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. “Federal private sector mandate” includes a regulation that “would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.”

The designation of critical habitat does not impose a legally binding duty on non-Federal government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded



Mandates Reform Act would not apply; nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule will significantly or uniquely affect small governments because the dusky gopher frog occurs primarily on Federal and privately owned lands. The designation of critical habitat imposes no obligations on State or local governments. By definition Federal agencies are not considered small entities, although the activities they fund or permit may be proposed or carried out by small entities. Consequently, we do not believe that the critical habitat designation will significantly or uniquely affect small government entities. Accordingly, a Small Government Agency Plan is not required.

#### *Takings—Executive Order 12630*

In accordance with Executive Order 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), the Service analyzed the potential takings implications of designating critical habitat for the dusky gopher frog and included this analysis in our administrative record. To a property owner, the designation of critical habitat becomes important when viewed in the context of section 7 of the Act, which requires all Federal agencies to ensure, in consultation with us, that any action authorized, funded, or carried out by the agency does not result in the destruction or adverse modification of designated critical habitat. If, after consultation, the Service's biological opinion concludes that a proposed action is likely to result in the destruction or adverse modification of critical habitat, we are required to suggest reasonable and

prudent alternatives to the action that would avoid the destruction or adverse modification of the critical habitat (16 U.S.C. 1536(b)(3)(A)). If we do not suggest acceptable reasonable and prudent alternatives, the agency (or the applicant) may apply for an exemption from the Endangered Species Committee under section 7(e)–(n) of the Act.

We have identified two “taking” scenarios that are relevant to the designation of critical habitat. The first is a physical taking when the government’s action amounts to a physical occupation or invasion of the property, including the functional equivalent of a practical ouster of the owner’s possession. The proposed designation of critical habitat for the dusky gopher frog would not result in physical occupation or invasion of private property. On non-Federal lands, activities that lack Federal involvement would not be affected by the critical habitat designation; these activities are likely to include timber management and oil and gas extraction. However, activities of an economic nature that are likely to occur on non-Federal lands in the area encompassed by this designation, and where Federal involvement may occur, consist of construction of utilities, residential or commercial development, and road construction and maintenance. The second scenario is where a regulation denies all economically beneficial or productive use of land, commonly referred to as a categorical taking. However, the mere promulgation of a regulation designating critical habitat does not on its face deny property owners all economically viable use of their land. The Act does not automatically restrict all uses of critical habitat, but only imposes restrictions under section 7(a)(2) on Federal agency actions that may result in destruction or adverse modification of critical habitat. Furthermore, as discussed above, if a biological opinion concludes that a proposed action is likely to result in the destruction or adverse modification of critical habitat, we are

required to suggest reasonable and prudent alternatives to the action that would avoid the destruction or adverse modification of critical habitat. Such alternatives must be economically, as well as technologically, feasible (50 CFR 402.02). Based on information contained in the final economic analysis assessment and described within this document, it is not likely that economic impacts to a property owner would be of a sufficient magnitude to support a takings action. The takings implications assessment concludes that this designation of critical habitat for the dusky gopher frog does not pose significant takings implications for lands within or affected by the designation.

#### *Federalism—Executive Order 13132*

In accordance with Executive Order 13132 (Federalism), this rule does not have significant Federalism effects. A federalism impact summary statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, this critical habitat designation with appropriate State resource agencies in Louisiana and Mississippi. We received no comments responsive to the critical habitat designation from a state agency except for a response from one of the peer reviewers who is employed by a state agency. The peer reviewer's comments were incorporated in the final rule (*See* Section **“Summary of Comments and Recommendations”**). The designation of critical habitat in areas currently occupied by the dusky gopher frog imposes no additional restrictions beyond those currently in place, although the designation of areas currently unoccupied by the dusky gopher frog may impose nominal additional regulatory restrictions. In total,

the critical habitat designation has little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments in that the areas that contain the physical and biological features essential to the conservation of the species are more clearly defined, and the elements of the features necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist local governments in long-range planning (rather than having them wait for case-by-case section 7 consultations to occur).

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) will be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

#### *Civil Justice Reform—Executive Order 12988*

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the applicable standards set forth in sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act. This

final rule uses standard property descriptions and identifies the elements of physical or biological features essential to the conservation of the dusky gopher frog within the designated areas to assist the public in understanding the habitat needs of the species.

*Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)*

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

*National Environmental Policy Act (42 U.S.C. 4321 et seq.)*

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)).

### *Government-to-Government Relationship with Tribes*

In accordance with the President's memorandum of April 29, 1994, (Government-to-Government Relations with Native American Tribal Governments; (59 FR 22951), Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments), and the Department of Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes. We determined that there are no tribal lands occupied by the dusky gopher frog at the time of listing that contain the features essential for the conservation of the species, and no tribal lands unoccupied by the dusky gopher frog that are essential for the conservation of the species. Therefore, we are not designating critical habitat for the dusky gopher frog on tribal lands.

### **References Cited**

A complete list of all references cited in this rulemaking is available on the Internet at <http://www.regulations.gov> and upon request from the Mississippi Ecological Services Field Office (see **ADDRESSES**).

## **Author**

The primary author of this rulemaking is Linda LaClaire of the Mississippi Ecological Services Field Office.

## **List of Subjects in 50 CFR Part 17**

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

## **Regulation Promulgation**

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

### **PART 17—[AMENDED]**

1. The authority citation for part 17 continues to read as follows:

**Authority:** 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

2. Amend § 17.11(h), the List of Endangered and Threatened Wildlife, as follows:
- a. By removing the entry for “Frog, Mississippi gopher” under “AMPHIBIANS”;
  - and
  - b. By adding an entry for “Frog, dusky gopher” in alphabetical order under “AMPHIBIANS” to read as follows:

**§ 17.11 Endangered and threatened wildlife.**

\* \* \* \* \*

(h) \* \* \*



Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						

\* \* \* \* \*

AMPHIBIANS

\* \* \* \* \*

Frog, dusky gopher	<i>Rana sevosa</i>	U.S.A. (AL, LA, MS)	Entire	E	718	17.95(d)	NA
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\* \* \* \* \*

**§ 17.95—[Amended]**

3. In § 17.95, amend paragraph (d) by adding an entry for “Dusky Gopher Frog (*Rana sevosa*),” in the same alphabetical order that the species appears in the table at § 17.11(h), to read as follows:

**§ 17.95 Critical habitat—fish and wildlife.**

\* \* \* \* \*

(d) *Amphibians.*

\* \* \* \* \*

Dusky Gopher Frog (*Rana sevosa*)

(1) Critical habitat units are depicted for St. Tammany Parish, Louisiana, and Forrest, Harrison, Jackson, and Perry Counties in Mississippi, on the maps below.

(2) Within these areas, the primary constituent elements of the physical or biological features essential to the conservation of the dusky gopher frog are:

(i) *Ephemeral wetland habitat.* Breeding ponds, geographically isolated from other waterbodies and embedded in forests historically dominated by longleaf pine

communities, that are small (generally <0.4 to 4.0 hectares (<1 to 10 acres)), ephemeral, and acidic. Specific conditions necessary in breeding ponds to allow for successful reproduction of dusky gopher frogs are:

(A) An open canopy with emergent herbaceous vegetation for egg attachment;

(B) An absence of large, predatory fish that prey on frog larvae;

(C) Water quality such that frogs, their eggs, or larvae are not exposed to pesticides or chemicals and sediment associated with road runoff; and

(D) Surface water that lasts for a minimum of 195 days during the breeding season to allow a sufficient period for larvae to hatch, mature, and metamorphose.

(ii) *Upland forested nonbreeding habitat.* Forests historically dominated by longleaf pine, adjacent to and accessible to and from breeding ponds, that are maintained by fires frequent enough to support an open canopy and abundant herbaceous ground cover and gopher tortoise burrows, small mammal burrows, stump holes, or other underground habitat that the dusky gopher frog depends upon for food, shelter, and protection from the elements and predation.

(iii) *Upland connectivity habitat.* Accessible upland habitat between breeding and nonbreeding habitats to allow for dusky gopher frog movements between and among

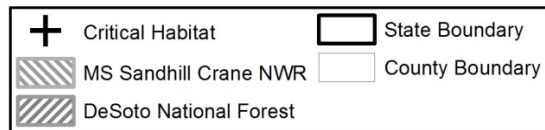
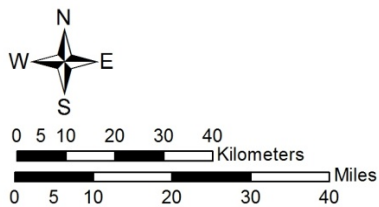
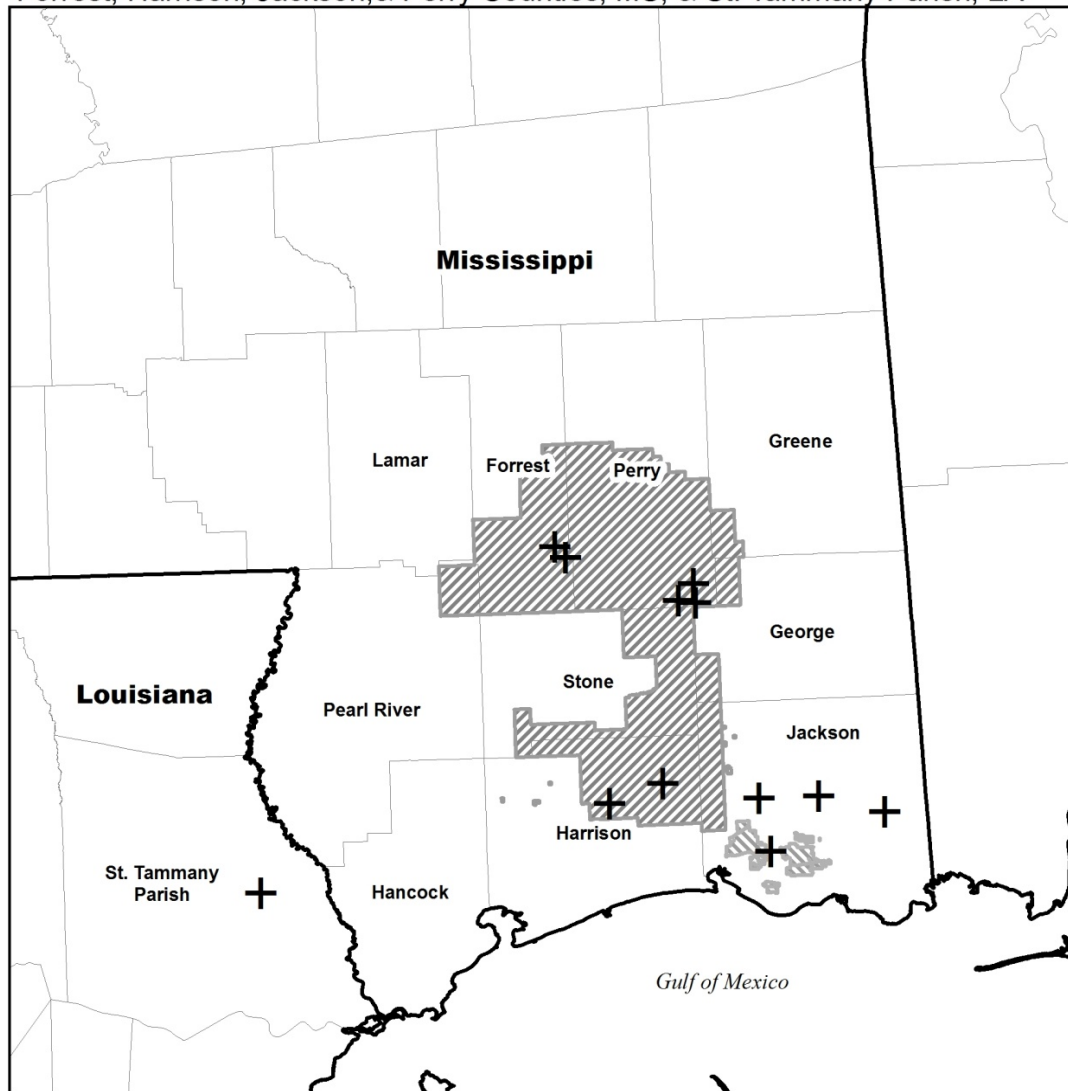
such sites. This habitat is characterized by an open canopy, abundant native herbaceous species, and a subsurface structure that provides shelter for dusky gopher frogs during seasonal movements, such as that created by deep litter cover, clumps of grass, or burrows.

(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on the effective date of this rule.

(4) *Critical habitat unit maps.* Data layers defining map units were developed from USGS 7.5' quadrangles, and critical habitat units were then mapped using Universal Transverse Mercator (UTM) coordinates.

(5) *Note:* Index map of the critical habitat units for the dusky gopher frog follows:

Index Map  
 Critical Habitat for the Dusky Gopher Frog  
 Forrest, Harrison, Jackson, & Perry Counties, MS, & St. Tammany Parish, LA



(6) Unit 1: St. Tammany Parish, Louisiana.

(i) From USGS 1:24,000 quadrangle map Hickory, Louisiana. Land bounded by the following UTM Zone 16N, NAD 83 coordinates, (E, N): 228777, 3368004; 229406, 3365105; 229384, 3365104; 229362, 3365105; 229339, 3365106; 229317, 365108; 229295, 3365110; 229273, 3365114; 229252, 3365118; 229230, 3365123; 229209, 3365129; 229188, 3365136; 229167, 3365143; 229146, 3365151; 229126, 3365160; 229106, 3365170; 229086, 3365180; 229067, 3365191; 229048, 3365203; 229030, 3365215; 229012, 3365228; 228994, 3365242; 228977, 3365256; 228961, 3365271; 228945, 3365286; 228929, 3365302; 228914, 3365318; 228900, 3365335; 228887, 3365353; 228874, 3365371; 228861, 3365389; 228850, 3365408; 228839, 3365428; 228828, 3365447; 228819, 3365467; 228810, 3365487; 228802, 3365508; 228794, 3365529; 228788, 3365550; 228782, 3365572; 228777, 3365593; 228773, 3365615; 228769, 3365637; 228766, 3365659; 228764, 3365681; 228763, 3365700; 228688, 3366732; 228321, 3367548; 227537, 3368623; 227307, 3368893; 227292, 3368909; 227278, 3368926; 227264, 3368944; 227251, 3368962; 227239, 3368980; 227227, 3368999; 227216, 3369018; 227206, 3369038; 227196, 3369058; 227187, 3369078; 227179, 3369099; 227172, 3369120; 227165, 3369141; 227159, 3369163; 227154, 3369184; 227150, 3369206; 227146, 3369228; 227144, 3369250; 227142, 3369272; 227140, 3369294; 227140, 3369316; 227140, 3369338; 227142, 3369360; 227144, 3369382; 227146, 3369404; 227150, 3369426; 227154, 3369448; 227159, 3369470; 227165, 3369491; 227172, 3369512; 227179, 3369533; 227187, 3369554; 227196, 3369574; 227206, 3369594; 227216, 3369614; 227227, 3369633; 227239, 3369652; 227251, 3369670; 227264, 3369688; 227278, 3369706; 227292, 3369723; 227307,

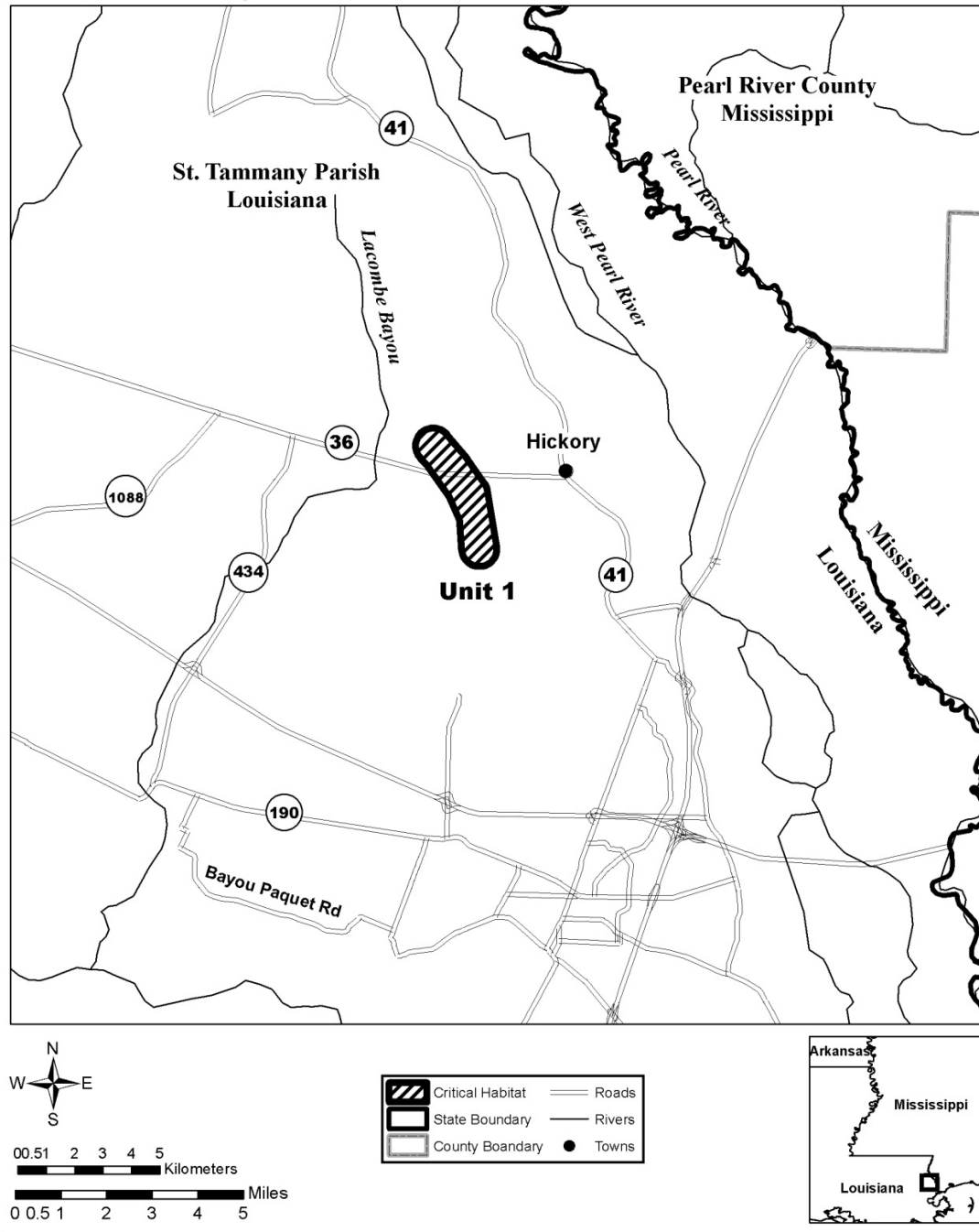
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229406, 3365105.

(ii) **Note:** Map of Unit 1 follows:



Critical Habitat for the Dusky Gopher Frog  
Unit 1, St. Tammany Parish, Louisiana



(7) Unit 2: Harrison County, Mississippi.

(i) Subunit 2A, Harrison County, Mississippi. From USGS 1:24,000 scale quadrangle map Success, Mississippi. Land bounded by the following UTM Zone 16N, NAD 83 coordinates, (E, N): 300727, 3382207; 300749, 3381710; 300727, 3381710; 300705, 3381710; 300683, 3381711; 300661, 3381713; 300639, 3381716; 300617, 3381720; 300595, 3381724; 300574, 3381729; 300552, 3381735; 300531, 3381742; 300510, 3381749; 300490, 3381757; 300469, 3381766; 300449, 3381775; 300430, 3381786; 300410, 3381797; 300391, 3381808; 300373, 3381821; 300355, 3381834; 300338, 3381847; 300321, 3381861; 300304, 3381876; 300288, 3381892; 300273, 3381908; 300258, 3381924; 300244, 3381941; 300230, 3381959; 300217, 3381977; 300205, 3381995; 300193, 3382014; 300182, 3382033; 300172, 3382053; 300162, 3382073; 300153, 3382093; 300145, 3382114; 300138, 3382135; 300131, 3382156; 300125, 3382177; 300120, 3382199; 300116, 3382220; 300113, 3382242; 300110, 3382264; 300108, 3382286; 300107, 3382309; 300106, 3382331; 300107, 3382353; 300108, 3382375; 300110, 3382397; 300113, 3382419; 300116, 3382441; 300120, 3382463; 300123, 3382473; 300125, 3382484; 300131, 3382506; 300138, 3382527; 300145, 3382548; 300153, 3382568; 300162, 3382589; 300172, 3382609; 300182, 3382628; 300193, 3382648; 300205, 3382666; 300217, 3382685; 300230, 3382703; 300244, 3382720; 300258, 3382737; 300273, 3382754; 300288, 3382770; 300304, 3382785; 300321, 3382800; 300338, 3382814; 300355, 3382828; 300373, 3382841; 300391, 3382853; 300410, 3382865; 300430, 3382876; 300449, 3382886; 300469, 3382896; 300490, 3382904; 300510, 3382913; 300531, 3382920; 300552, 3382927;

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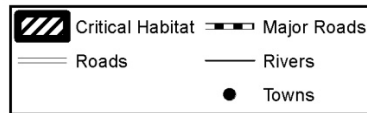
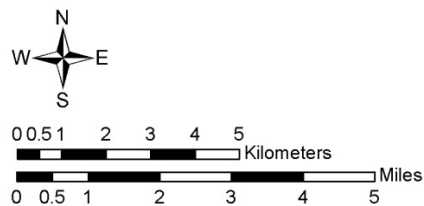
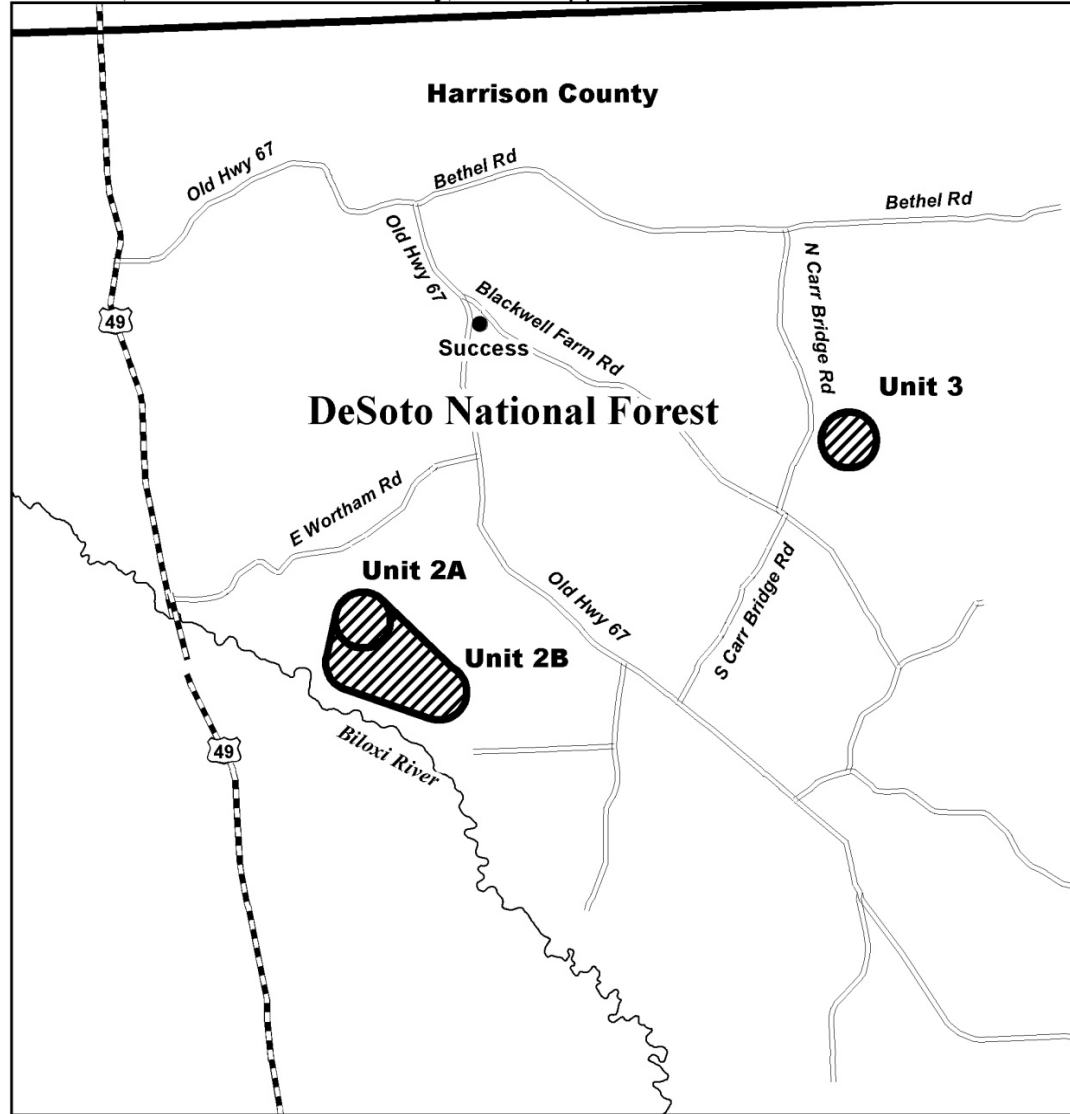
(ii) Subunit 2B, Harrison County, Mississippi. From USGS 1:24,000 scale quadrangle map Success, Mississippi. Land bounded by the following UTM Zone 16N, NAD 83 coordinates, (E, N): 301340, 3381104; 301399, 3382522; 302686, 3381163; 302704, 3381151; 302722, 3381138; 302740, 3381124; 302757, 3381110; 302773, 3381095; 302789, 3381080; 302804, 3381064; 302819, 3381048; 302833, 3381031; 302847, 3381013; 302860, 3380995; 302872, 3380977; 302884, 3380958; 302895, 3380939; 302905, 3380919; 302915, 3380899; 302924, 3380879; 302932, 3380858; 302939, 3380837; 302946, 3380816; 302952, 3380794; 302957, 3380773; 302961, 3380751; 302965, 3380729; 302967, 3380707; 302969, 3380685; 302969, 3380684; 302970, 3380663; 302971, 3380641; 302970, 3380619; 302969, 3380597; 302967, 3380575; 302965, 3380553; 302961, 3380531; 302957, 3380509; 302952, 3380487; 302950, 3380482; 302946, 3380466; 302939, 3380445; 302932, 3380424; 302924, 3380403; 302915, 3380383; 302905, 3380363; 302895, 3380343; 302884, 3380324; 302872, 3380305; 302860, 3380287; 302847, 3380269; 302833, 3380251; 302819, 3380234; 302804, 3380218; 302789, 3380202; 302773, 3380186; 302757, 3380172; 302740, 3380157; 302722, 3380144; 302704, 3380131; 302686, 3380118; 302667, 3380107; 302647, 3380096; 302628, 3380086; 302608, 3380076; 302588, 3380067; 302567, 3380059; 302546, 3380052; 302525, 3380045; 302503, 3380039; 302482, 3380034; 302460, 3380030; 302438, 3380026; 302416, 3380023; 302394, 3380022; 302372, 3380020; 302350, 3380020; 302328, 3380020; 302306, 3380022; 302283, 3380023; 302261, 3380026; 302240, 3380030; 302218, 3380034; 302196, 3380039; 302175, 3380045; 302154, 3380052; 302133, 3380059; 302112, 3380067; 302092, 3380076; 300268, 3380807; 300247, 3380814; 300226, 3380822; 300206, 3380831;

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(iii) **Note:** Map of Units 2 and 3 follows:

Critical Habitat for the Dusky Gopher Frog  
Units 2a, 2b & 3 Harrison County, Mississippi



(8) Unit 3: Harrison County, Mississippi.

(i) From USGS 1:24,000 scale quadrangle map White Plains, Mississippi. Land bounded by the following UTM Zone 16N, NAD 83 coordinates, (E, N): 311835, 3385625; 311857, 3385128; 311835, 3385128; 311812, 3385128; 311790, 3385130; 311768, 3385132; 311746, 3385134; 311724, 3385138; 311703, 3385142; 311681, 3385147; 311660, 3385153; 311639, 3385160; 311618, 3385167; 311597, 3385175; 311577, 3385184; 311557, 3385194; 311537, 3385204; 311518, 3385215; 311499, 3385227; 311480, 3385239; 311462, 3385252; 311445, 3385265; 311428, 3385280; 311411, 3385295; 311396, 3385310; 311380, 3385326; 311365, 3385342; 311351, 3385359; 311338, 3385377; 311325, 3385395; 311312, 3385413; 311301, 3385432; 311290, 3385451; 311279, 3385471; 311270, 3385491; 311261, 3385511; 311253, 3385532; 311245, 3385553; 311239, 3385574; 311233, 3385595; 311228, 3385617; 311224, 3385639; 311220, 3385661; 311217, 3385683; 311215, 3385705; 311214, 3385727; 311214, 3385749; 311214, 3385771; 311215, 3385793; 311217, 3385815; 311220, 3385837; 311224, 3385859; 311228, 3385881; 311233, 3385903; 311239, 3385924; 311245, 3385945; 311253, 3385966; 311261, 3385987; 311270, 3386007; 311279, 3386027; 311290, 3386047; 311301, 3386066; 311312, 3386085; 311325, 3386103; 311338, 3386121; 311351, 3386139; 311365, 3386156; 311380, 3386172; 311396, 3386188; 311411, 3386204; 311428, 3386218; 311445, 3386233; 311462, 3386246; 311480, 3386259; 311499, 3386271; 311518, 3386283; 311537, 3386294; 311557, 3386304; 311577, 3386314; 311597, 3386323; 311618, 3386331; 311639, 3386338; 311660, 3386345; 311681, 3386351; 311703, 3386356; 311724, 3386360;



311746, 3386364; 311768, 3386366; 311790, 3386368; 311812, 3386370; 311835, 3386370; 311857, 3386370; 311879, 3386368; 311901, 3386366; 311923, 3386364; 311945, 3386360; 311967, 3386356; 311988, 3386351; 312010, 3386345; 312031, 3386338; 312052, 3386331; 312072, 3386323; 312093, 3386314; 312113, 3386304; 312132, 3386294; 312152, 3386283; 312170, 3386271; 312189, 3386259; 312207, 3386246; 312224, 3386233; 312241, 3386218; 312258, 3386204; 312274, 3386188; 312289, 3386172; 312304, 3386156; 312318, 3386139; 312332, 3386121; 312345, 3386103; 312357, 3386085; 312369, 3386066; 312380, 3386047; 312390, 3386027; 312400, 3386007; 312408, 3385987; 312416, 3385966; 312424, 3385945; 312430, 3385924; 312436, 3385903; 312441, 3385881; 312446, 3385859; 312449, 3385837; 312452, 3385815; 312454, 3385793; 312455, 3385771; 312456, 3385749; 312455, 3385727; 312454, 3385705; 312452, 3385683; 312449, 3385661; 312446, 3385639; 312441, 3385617; 312436, 3385595; 312430, 3385574; 312424, 3385553; 312416, 3385532; 312408, 3385511; 312400, 3385491; 312390, 3385471; 312380, 3385451; 312369, 3385432; 312357, 3385413; 312345, 3385395; 312332, 3385377; 312318, 3385359; 312304, 3385342; 312289, 3385326; 312274, 3385310; 312258, 3385295; 312241, 3385280; 312224, 3385265; 312207, 3385252; 312189, 3385239; 312170, 3385227; 312152, 3385215; 312132, 3385204; 312113, 3385194; 312093, 3385184; 312072, 3385175; 312052, 3385167; 312031, 3385160; 312010, 3385153; 311988, 3385147; 311967, 3385142; 311945, 3385138; 311923, 3385134; 311901, 3385132; 311879, 3385130; 311857, 3385128.

(ii) **Note:** Map of Unit 3 is provided at paragraph (7)(iii) of this entry.

(9) Unit 4: Jackson County, Mississippi.

(i) Subunit 4A. From USGS 1:24,000 scale quadrangle map Gauthier North, Mississippi. Land bounded by the following UTM Zone 16N, NAD 83 coordinates, (E, N): 333109, 3370810; 333632, 3370599; 333619, 3370580; 333606, 3370562; 333593, 3370545; 333579, 3370528; 333564, 3370511; 333548, 3370495; 333532, 3370480; 333516, 3370465; 333499, 3370451; 333481, 3370437; 333463, 3370425; 333445, 3370412; 333426, 3370401; 333407, 3370390; 333387, 3370379; 333367, 3370370; 333347, 3370361; 333326, 3370353; 333305, 3370345; 333284, 3370339; 333263, 3370333; 333241, 3370328; 333220, 3370323; 333198, 3370320; 333176, 3370317; 333154, 3370315; 333131, 3370314; 333109, 3370314; 333087, 3370314; 333065, 3370315; 333043, 3370317; 333021, 3370320; 332999, 3370323; 332977, 3370328; 332956, 3370333; 332934, 3370339; 332913, 3370345; 332892, 3370353; 332872, 3370361; 332851, 3370370; 332831, 3370379; 332812, 3370390; 332792, 3370401; 332774, 3370412; 332755, 3370425; 332737, 3370437; 332720, 3370451; 332703, 3370465; 332686, 3370480; 332670, 3370495; 332655, 3370511; 332640, 3370528; 332626, 3370545; 332612, 3370562; 332599, 3370580; 332587, 3370599; 332575, 3370618; 332564, 3370637; 332554, 3370657; 332544, 3370677; 332536, 3370697; 332527, 3370718; 332520, 3370739; 332513, 3370760; 332508, 3370781; 332502, 3370803; 332498, 3370824; 332495, 3370846; 332492, 3370868; 332490, 3370890; 332489, 3370912; 332488, 3370935; 332489, 3370957; 332490, 3370979; 332492, 3371001; 332495, 3371023; 332498, 3371045; 332502, 3371067; 332508, 3371088; 332513, 3371110; 332520, 3371131; 332527, 3371152; 332536, 3371172; 332544,

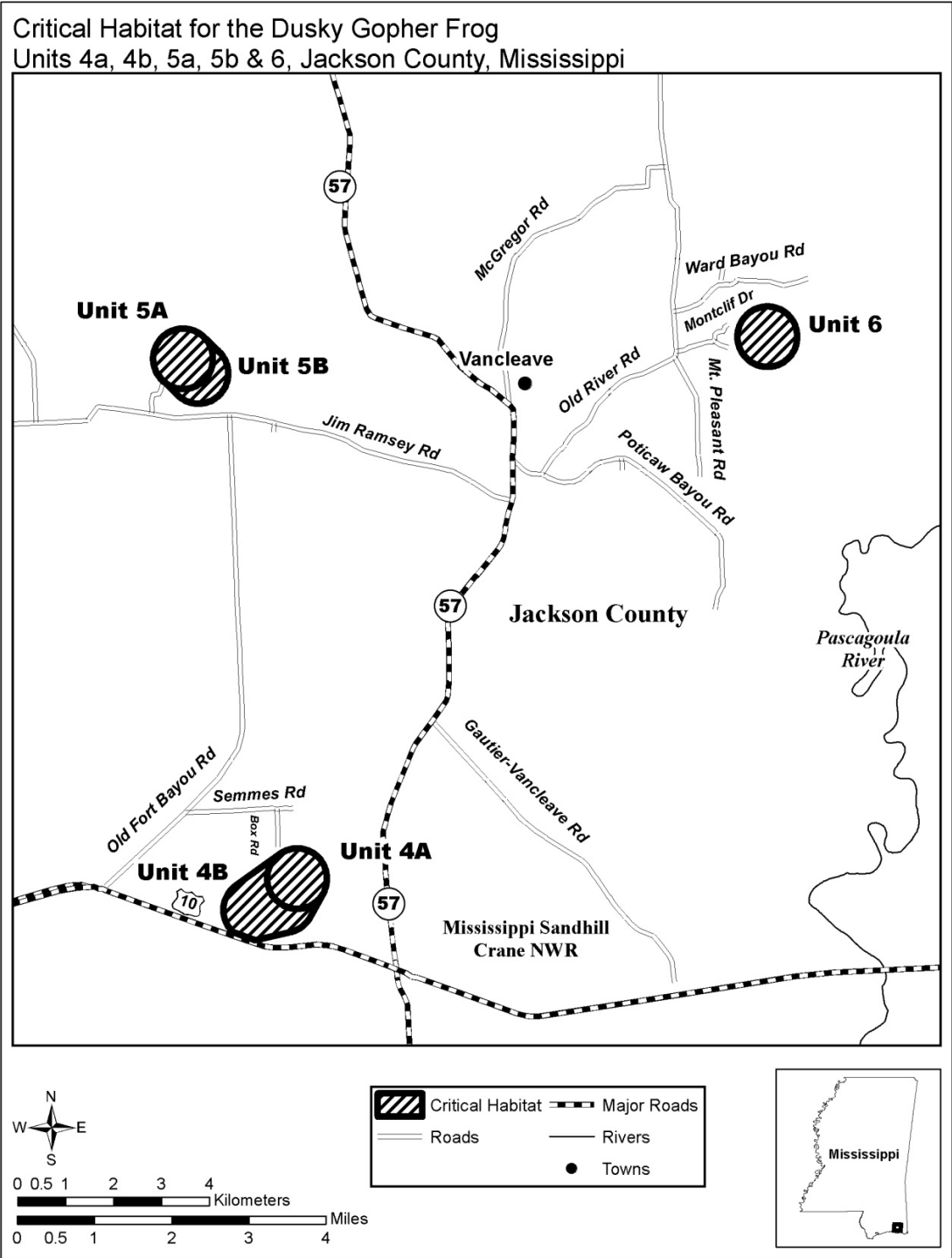
3371193; 332554, 3371213; 332564, 3371232; 332575, 3371251; 332587, 3371270;  
332599, 3371289; 332612, 3371307; 332626, 3371324; 332640, 3371341; 332655,  
3371358; 332670, 3371374; 332686, 3371389; 332703, 3371404; 332720, 3371418;  
332737, 3371432; 332755, 3371445; 332766, 3371452; 332774, 3371457; 332792,  
3371469; 332812, 3371480; 332831, 3371490; 332851, 3371499; 332872, 3371508;  
332892, 3371516; 332913, 3371524; 332934, 3371530; 332956, 3371536; 332977,  
3371541; 332999, 3371546; 333021, 3371549; 333043, 3371552; 333065, 3371554;  
333087, 3371555; 333109, 3371556; 333131, 3371555; 333154, 3371554; 333176,  
3371552; 333198, 3371549; 333220, 3371546; 333241, 3371541; 333263, 3371536;  
333284, 3371530; 333305, 3371524; 333326, 3371516; 333347, 3371508; 333367,  
3371499; 333387, 3371490; 333407, 3371480; 333426, 3371469; 333445, 3371457;  
333463, 3371445; 333481, 3371432; 333499, 3371418; 333516, 3371404; 333532,  
3371389; 333548, 3371374; 333564, 3371358; 333579, 3371341; 333593, 3371324;  
333606, 3371307; 333619, 3371289; 333632, 3371270; 333643, 3371251; 333654,  
3371232; 333665, 3371213; 333674, 3371193; 333683, 3371172; 333691, 3371152;  
333699, 3371131; 333705, 3371110; 333711, 3371088; 333716, 3371067; 333720,  
3371045; 333724, 3371023; 333727, 3371001; 333729, 3370979; 333730, 3370957;  
333730, 3370935; 333730, 3370912; 333729, 3370890; 333727, 3370868; 333724,  
3370846; 333720, 3370824; 333716, 3370803; 333711, 3370781; 333705, 3370760;  
333699, 3370739; 333691, 3370718; 333683, 3370697; 333674, 3370677; 333665,  
3370657; 333654, 3370637; 333643, 3370618; 333632, 3370599.

(ii) Subunit 4B. From USGS 1:24,000 scale quadrangle maps Gauthier North and

Ocean Springs, Mississippi. Land bounded by the following UTM Zone 16N, NAD 83 coordinates, (E, N): 332162, 3370411; 332175, 3369717; 331717, 3369908; 331711, 3369915; 331696, 3369932; 331682, 3369949; 331668, 3369966; 331655, 3369984; 331643, 3370003; 331631, 3370021; 331621, 3370041; 331610, 3370060; 331601, 3370080; 331592, 3370101; 331584, 3370121; 331576, 3370142; 331570, 3370163; 331564, 3370185; 331559, 3370206; 331554, 3370228; 331551, 3370250; 331548, 3370272; 331546, 3370294; 331545, 3370316; 331545, 3370338; 331545, 3370360; 331546, 3370383; 331548, 3370405; 331551, 3370427; 331554, 3370448; 331559, 3370470; 331564, 3370492; 331570, 3370513; 331576, 3370534; 331584, 3370555; 331592, 3370576; 331601, 3370596; 331610, 3370616; 331621, 3370636; 331631, 3370655; 331643, 3370674; 331655, 3370692; 331668, 3370710; 331682, 3370728; 331696, 3370745; 331711, 3370761; 331726, 3370777; 331742, 3370793; 331759, 3370808; 331776, 3370822; 331793, 3370835; 331811, 3370848; 331830, 3370861; 331849, 3370872; 332766, 3371452; 332755, 3371445; 332737, 3371432; 332720, 3371418; 332703, 3371404; 332686, 3371389; 332670, 3371374; 332655, 3371358; 332640, 3371341; 332626, 3371324; 332612, 3371307; 332599, 3371289; 332587, 3371270; 332575, 3371251; 332564, 3371232; 332554, 3371213; 332544, 3371193; 332536, 3371172; 332527, 3371152; 332520, 3371131; 332513, 3371110; 332508, 3371088; 332502, 3371067; 332498, 3371045; 332495, 3371023; 332492, 3371001; 332490, 3370979; 332489, 3370957; 332488, 3370935; 332489, 3370912; 332490, 3370890; 332492, 3370868; 332495, 3370846; 332498, 3370824; 332502, 3370803; 332508, 3370781; 332513, 3370760; 332520, 3370739; 332527, 3370718; 332536, 3370697; 332544, 3370677; 332554, 3370657; 332564, 3370637; 332575, 3370618;

332587, 3370599; 332599, 3370580; 332612, 3370562; 332626, 3370545; 332640,  
3370528; 332655, 3370511; 332670, 3370495; 332686, 3370480; 332703, 3370465;  
332720, 3370451; 332737, 3370437; 332755, 3370425; 332774, 3370412; 332792,  
3370401; 332812, 3370390; 332831, 3370379; 332851, 3370370; 332872, 3370361;  
332892, 3370353; 332913, 3370345; 332934, 3370339; 332956, 3370333; 332977,  
3370328; 332999, 3370323; 333021, 3370320; 333043, 3370317; 333065, 3370315;  
333087, 3370314; 333109, 3370314; 333131, 3370314; 333154, 3370315; 333176,  
3370317; 333198, 3370320; 333220, 3370323; 333241, 3370328; 333263, 3370333;  
333284, 3370339; 333305, 3370345; 333326, 3370353; 333347, 3370361; 333367,  
3370370; 333387, 3370379; 333407, 3370390; 333426, 3370401; 333445, 3370412;  
333463, 3370425; 333481, 3370437; 333499, 3370451; 333516, 3370465; 333532,  
3370480; 333548, 3370495; 333564, 3370511; 333579, 3370528; 333593, 3370545;  
333606, 3370562; 333619, 3370580; 333632, 3370599; 33366, 3370173; 333359,  
3370159; 333348, 3370140; 333336, 3370121; 333324, 3370103; 333311, 3370085;  
333297, 3370067; 333283, 3370050; 333268, 3370034; 333253, 3370018; 333237,  
3370002; 333220, 3369987; 333203, 3369973; 333186, 3369960; 333168, 3369947;  
333149, 3369934; 333131, 3369923; 333111, 3369912; 333092, 3369901; 333072,  
3369892; 333051, 3369883; 333031, 3369875; 333010, 3369868; 332989, 3369861;  
332967, 3369855; 332946, 3369850; 332924, 3369846; 332902, 3369842; 332880,  
3369839; 332867, 3369838; 332303, 3369733; 332298, 3369731; 332276, 3369727;  
332254, 3369724; 332232, 3369721; 332210, 3369719; 332188, 3369718; 332175,  
3369717.

(iii) **Note:** Map of Units 4, 5, and 6 follows:



(10) Unit 5: Jackson County, Mississippi.

(i) Subunit 5A. From USGS 1:24,000 scale quadrangle map Latimer, Mississippi.

Land bounded by the following UTM Zone 16N, NAD 83 coordinates, (E, N): 331312, 3381629; 331800, 3382137; 331809, 3382125; 331822, 3382107; 331834, 3382089; 331846, 3382070; 331857, 3382050; 331867, 3382031; 331877, 3382011; 331886, 3381990; 331894, 3381970; 331901, 3381949; 331908, 3381928; 331914, 3381906; 331919, 3381885; 331923, 3381863; 331927, 3381841; 331929, 3381819; 331931, 3381797; 331932, 3381775; 331933, 3381753; 331932, 3381731; 331931, 3381708; 331929, 3381686; 331927, 3381664; 331923, 3381643; 331919, 3381621; 331914, 3381599; 331908, 3381578; 331901, 3381557; 331894, 3381536; 331886, 3381515; 331877, 3381495; 331867, 3381475; 331857, 3381455; 331846, 3381436; 331834, 3381417; 331822, 3381399; 331809, 3381381; 331795, 3381363; 331781, 3381346; 331766, 3381330; 331751, 3381314; 331735, 3381298; 331719, 3381283; 331702, 3381269; 331684, 3381256; 331666, 3381243; 331648, 3381230; 331629, 3381219; 331610, 3381208; 331590, 3381197; 331570, 3381188; 331550, 3381179; 331529, 3381171; 331508, 3381164; 331487, 3381157; 331465, 3381151; 331444, 3381146; 331422, 3381142; 331400, 3381138; 331378, 3381135; 331356, 3381133; 331334, 3381132; 331312, 3381132; 331290, 3381132; 331268, 3381133; 331246, 3381135; 331224, 3381138; 331202, 3381142; 331180, 3381146; 331158, 3381151; 331137, 3381157; 331116, 3381164; 331095, 3381171; 331074, 3381179; 331054, 3381188; 331034, 3381197; 331014, 3381208; 330995, 3381219; 330976, 3381230; 330958, 3381243; 330940, 3381256; 330922, 3381269; 330905, 3381283; 330904, 3381284;

330889, 3381298; 330873, 3381314; 330857, 3381330; 330843, 3381346; 330828,  
3381363; 330815, 3381381; 330802, 3381399; 330789, 3381417; 330778, 3381436;  
330767, 3381455; 330757, 3381475; 330747, 3381495; 330738, 3381515; 330730,  
3381536; 330723, 3381557; 330716, 3381578; 330710, 3381599; 330705, 3381621;  
330701, 3381643; 330697, 3381664; 330694, 3381686; 330692, 3381708; 330691,  
3381731; 330691, 3381753; 330691, 3381775; 330692, 3381797; 330694, 3381819;  
330697, 3381841; 330701, 3381863; 330705, 3381885; 330710, 3381906; 330716,  
3381928; 330723, 3381949; 330730, 3381970; 330738, 3381990; 330747, 3382011;  
330757, 3382031; 330767, 3382050; 330778, 3382070; 330789, 3382089; 330802,  
3382107; 330815, 3382125; 330828, 3382142; 330843, 3382159; 330857, 3382176;  
330873, 3382192; 330889, 3382207; 330905, 3382222; 330922, 3382236; 330940,  
3382250; 330958, 3382263; 330976, 3382275; 330995, 3382287; 331014, 3382298;  
331034, 3382308; 331054, 3382318; 331074, 3382327; 331095, 3382335; 331116,  
3382342; 331137, 3382349; 331158, 3382355; 331180, 3382360; 331202, 3382364;  
331224, 3382367; 331246, 3382370; 331268, 3382372; 331290, 3382373; 331312,  
3382374; 331334, 3382373; 331356, 3382372; 331378, 3382370; 331400, 3382367;  
331422, 3382364; 331444, 3382360; 331465, 3382355; 331487, 3382349; 331508,  
3382342; 331529, 3382335; 331550, 3382327; 331570, 3382318; 331590, 3382308;  
331610, 3382298; 331629, 3382287; 331648, 3382275; 331666, 3382263; 331684,  
3382250; 331702, 3382236; 331719, 3382222; 331735, 3382207; 331751, 3382192;  
331766, 3382176; 331781, 3382159; 331795, 3382142; 331800, 3382137.



(ii) Subunit 5B. From USGS 1:24,000 scale quadrangle maps Latimer and Vancleave, Mississippi. Land bounded by the following UTM Zone 16N, NAD 83 coordinates, (E, N): 332002, 3381342; 330904, 3381284; 330905, 3381283; 330922, 3381269; 330940, 3381256; 330958, 3381243; 330976, 3381230; 330995, 3381219; 331014, 3381208; 331034, 3381197; 331054, 3381188; 331074, 3381179; 331095, 3381171; 331116, 3381164; 331137, 3381157; 331158, 3381151; 331180, 3381146; 331202, 3381142; 331224, 3381138; 331246, 3381135; 331268, 3381133; 331290, 3381132; 331312, 3381132; 331334, 3381132; 331356, 3381133; 331378, 3381135; 331400, 3381138; 331422, 3381142; 331444, 3381146; 331465, 3381151; 331487, 3381157; 331508, 3381164; 331529, 3381171; 331550, 3381179; 331570, 3381188; 331590, 3381197; 331610, 3381208; 331629, 3381219; 331648, 3381230; 331666, 3381243; 331684, 3381256; 331702, 3381269; 331719, 3381283; 331735, 3381298; 331751, 3381314; 331766, 3381330; 331781, 3381346; 331795, 3381363; 331809, 3381381; 331822, 3381399; 331834, 3381417; 331846, 3381436; 331857, 3381455; 331867, 3381475; 331877, 3381495; 331886, 3381515; 331894, 3381536; 331901, 3381557; 331908, 3381578; 331914, 3381599; 331919, 3381621; 331923, 3381643; 331927, 3381664; 331929, 3381686; 331931, 3381708; 331932, 3381731; 331933, 3381753; 331932, 3381775; 331931, 3381797; 331929, 3381819; 331927, 3381841; 331923, 3381863; 331919, 3381885; 331914, 3381906; 331908, 3381928; 331901, 3381949; 331894, 3381970; 331886, 3381990; 331877, 3382011; 331867, 3382031; 331857, 3382050; 331846, 3382070; 331834, 3382089; 331822, 3382107; 331809, 3382125; 331800, 3382137; 332044, 3381881; 332052, 3381873; 332067, 3381857;

332082, 3381840; 332096, 3381823; 332110, 3381806; 332123, 3381788; 332135,  
3381769; 332147, 3381750; 332158, 3381731; 332168, 3381711; 332178, 3381691;  
332187, 3381671; 332195, 3381650; 332202, 3381630; 332209, 3381608; 332215,  
3381587; 332220, 3381565; 332224, 3381544; 332228, 3381522; 332230, 3381500;  
332232, 3381478; 332234, 3381456; 332234, 3381433; 332234, 3381411; 332232,  
3381389; 332230, 3381367; 332228, 3381345; 332224, 3381323; 332220, 3381301;  
332215, 3381280; 332209, 3381258; 332202, 3381237; 332195, 3381216; 332187,  
3381196; 332178, 3381175; 332168, 3381155; 332158, 3381136; 332147, 3381117;  
332135, 3381098; 332123, 3381079; 332110, 3381061; 332096, 3381044; 332082,  
3381027; 332067, 3381010; 332052, 3380994; 332036, 3380979; 332020, 3380964;  
332003, 3380950; 331985, 3380936; 331967, 3380923; 331949, 3380911; 331930,  
3380899; 331911, 3380888; 331891, 3380878; 331871, 3380869; 331851, 3380860;  
331830, 3380852; 331809, 3380844; 331788, 3380838; 331767, 3380832; 331745,  
3380827; 331723, 3380822; 331701, 3380819; 331679, 3380816; 331657, 3380814;  
331635, 3380813; 331613, 3380812; 331591, 3380813; 331569, 3380814; 331547,  
3380816; 331525, 3380819; 331503, 3380822; 331481, 3380827; 331459, 3380832;  
331438, 3380838; 331417, 3380844; 331396, 3380852; 331375, 3380860; 331355,  
3380869; 331335, 3380878; 331315, 3380888; 331296, 3380899; 331277, 3380911;  
331259, 3380923; 331241, 3380936; 331223, 3380950; 331206, 3380964; 331190,  
3380979; 331174, 3380994; 331158, 3381010; 331144, 3381027; 331143, 3381027;  
330904, 3381284.

(iii) **Note:** Map of Unit 5 is provided at paragraph (9)(iii) of this entry.

(11) Unit 6: Jackson County, Mississippi.

(i) From USGS 1:24,000 scale quadrangle map Vancleave, Mississippi. Land bounded by the following UTM Zone 16N, NAD 83 coordinates, (E, N): 343468, 3381436; 343490, 3380939; 343468, 3380939; 343446, 3380939; 343424, 3380940; 343402, 3380942; 343380, 3380945; 343358, 3380949; 343336, 3380953; 343314, 3380958; 343293, 3380964; 343272, 3380971; 343251, 3380978; 343230, 3380986; 343210, 3380995; 343190, 3381005; 343170, 3381015; 343151, 3381026; 343132, 3381037; 343114, 3381050; 343096, 3381063; 343078, 3381076; 343061, 3381091; 343045, 3381105; 343029, 3381121; 343014, 3381137; 342999, 3381153; 342984, 3381170; 342971, 3381188; 342958, 3381206; 342946, 3381224; 342934, 3381243; 342923, 3381262; 342913, 3381282; 342903, 3381302; 342894, 3381322; 342886, 3381343; 342879, 3381364; 342872, 3381385; 342866, 3381406; 342861, 3381428; 342857, 3381450; 342853, 3381472; 342851, 3381493; 342849, 3381516; 342847, 3381538; 342847, 3381560; 342847, 3381582; 342849, 3381604; 342851, 3381626; 342853, 3381648; 342857, 3381670; 342861, 3381692; 342866, 3381713; 342872, 3381735; 342879, 3381756; 342886, 3381777; 342894, 3381798; 342903, 3381818; 342913, 3381838; 342923, 3381857; 342934, 3381877; 342946, 3381896; 342958, 3381914; 342971, 3381932; 342984, 3381950; 342999, 3381967; 343014, 3381983; 343029, 3381999; 343045, 3382014; 343061, 3382029; 343078, 3382043; 343096, 3382057; 343114, 3382070; 343132, 3382082; 343151, 3382094; 343170, 3382105; 343190, 3382115; 343210, 3382125; 343230, 3382134; 343251, 3382142; 343272, 3382149; 343293, 3382156; 343314, 3382162; 343336, 3382167; 343358, 3382171;

343380, 3382175; 343402, 3382177; 343424, 3382179; 343446, 3382180; 343468,  
3382181; 343490, 3382180; 343512, 3382179; 343534, 3382177; 343556, 3382175;  
343578, 3382171; 343600, 3382167; 343622, 3382162; 343643, 3382156; 343664,  
3382149; 343685, 3382142; 343706, 3382134; 343726, 3382125; 343746, 3382115;  
343766, 3382105; 343785, 3382094; 343804, 3382082; 343822, 3382070; 343840,  
3382057; 343858, 3382043; 343875, 3382029; 343891, 3382014; 343907, 3381999;  
343923, 3381983; 343937, 3381967; 343952, 3381950; 343965, 3381932; 343978,  
3381914; 343990, 3381896; 344002, 3381877; 344013, 3381857; 344023, 3381838;  
344033, 3381818; 344042, 3381798; 344050, 3381777; 344057, 3381756; 344064,  
3381735; 344070, 3381713; 344075, 3381692; 344079, 3381670; 344083, 3381648;  
344085, 3381626; 344087, 3381604; 344089, 3381582; 344089, 3381560; 344089,  
3381538; 344087, 3381516; 344085, 3381493; 344083, 3381472; 344079, 3381450;  
344075, 3381428; 344070, 3381406; 344064, 3381385; 344057, 3381364; 344050,  
3381343; 344042, 3381322; 344033, 3381302; 344023, 3381282; 344013, 3381262;  
344002, 3381243; 343990, 3381224; 343978, 3381206; 343965, 3381188; 343952,  
3381170; 343937, 3381153; 343923, 3381137; 343907, 3381121; 343891, 3381105;  
343875, 3381091; 343858, 3381076; 343840, 3381063; 343822, 3381050; 343804,  
3381037; 343785, 3381026; 343766, 3381015; 343746, 3381005; 343726, 3380995;  
343706, 3380986; 343685, 3380978; 343664, 3380971; 343643, 3380964; 343622,  
3380958; 343600, 3380953; 343578, 3380949; 343556, 3380945; 343534, 3380942;  
343512, 3380940; 343490, 3380939.

(ii) **Note:** Map of Unit 6 is provided at paragraph (9)(iii) of this entry.

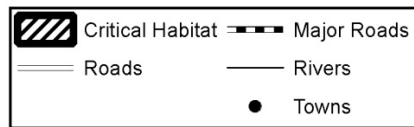
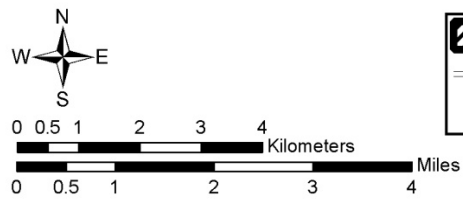
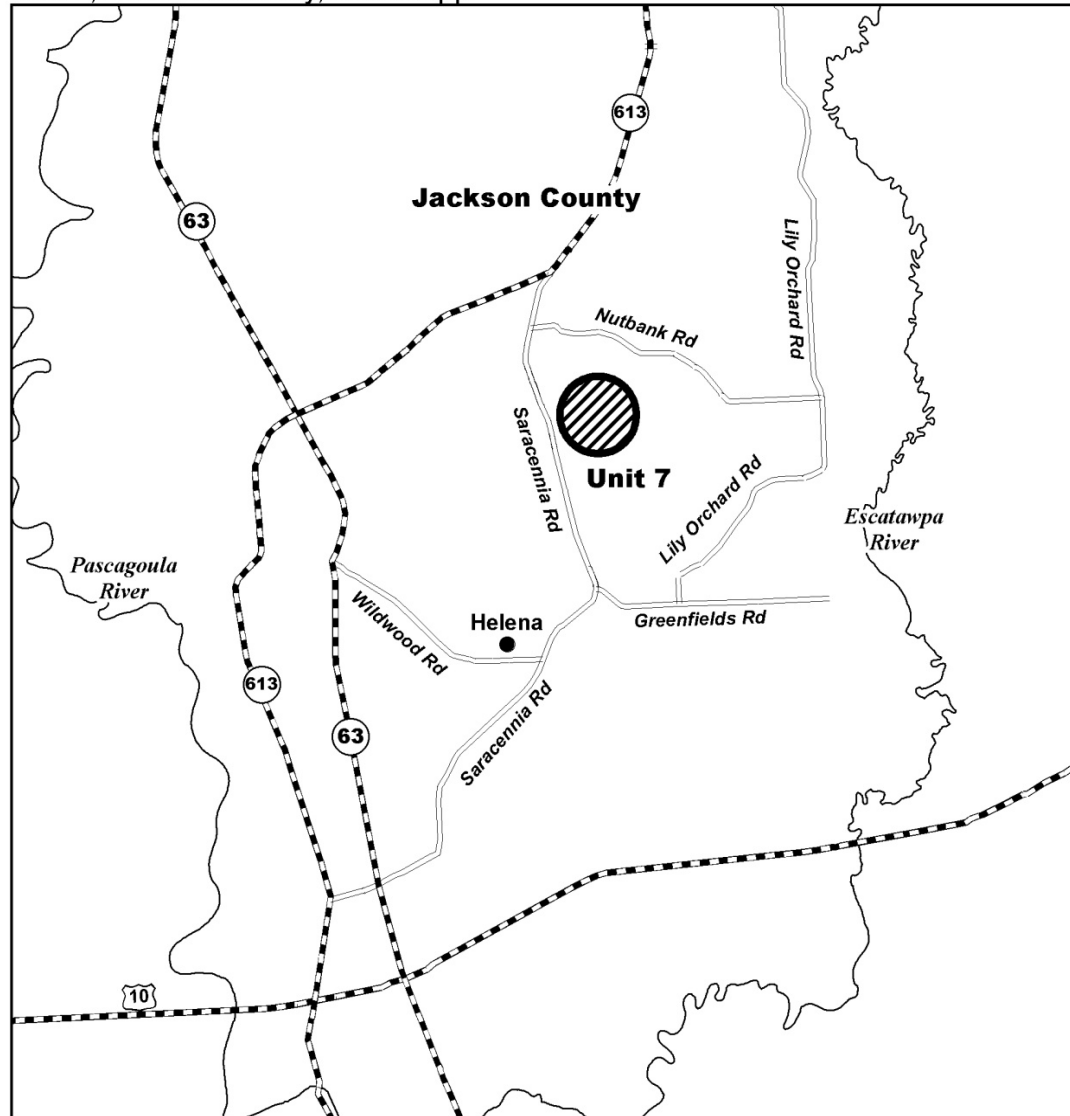
(12) Unit 7: Jackson County, Mississippi.

(i) From USGS 1:24,000 scale quadrangle map Big Point, Mississippi. Land bounded by the following UTM Zone 16N, NAD 83 coordinates, (E, N): 356810, 3377501; 356832, 3377004; 356810, 3377004; 356788, 3377004; 356766, 3377006; 356744, 3377008; 356722, 3377010; 356700, 3377014; 356678, 3377018; 356657, 3377023; 356635, 3377029; 356614, 3377036; 356593, 3377043; 356573, 3377051; 356552, 3377060; 356532, 3377070; 356513, 3377080; 356493, 3377091; 356474, 3377103; 356456, 3377115; 356438, 3377128; 356421, 3377142; 356404, 3377156; 356387, 3377171; 356371, 3377186; 356356, 3377202; 356341, 3377218; 356327, 3377235; 356313, 3377253; 356300, 3377271; 356288, 3377289; 356276, 3377308; 356265, 3377327; 356255, 3377347; 356245, 3377367; 356236, 3377387; 356228, 3377408; 356221, 3377429; 356214, 3377450; 356208, 3377471; 356203, 3377493; 356199, 3377515; 356196, 3377537; 356193, 3377559; 356191, 3377581; 356190, 3377603; 356189, 3377625; 356190, 3377647; 356191, 3377669; 356193, 3377691; 356196, 3377713; 356199, 3377735; 356203, 3377757; 356208, 3377779; 356214, 3377800; 356221, 3377821; 356228, 3377842; 356236, 3377863; 356245, 3377883; 356255, 3377903; 356265, 3377923; 356276, 3377942; 356288, 3377961; 356300, 3377979; 356313, 3377997; 356327, 3378015; 356341, 3378032; 356356, 3378048; 356371, 3378064; 356387, 3378080; 356404, 3378094; 356421, 3378109; 356438, 3378122; 356456, 3378135; 356474, 3378147; 356493, 3378159; 356513, 3378170; 356532, 3378180; 356552, 3378190; 356573, 3378199; 356593, 3378207; 356614, 3378214; 356635, 3378221; 356657, 3378227; 356678, 3378232; 356700, 3378236;

356722, 3378240; 356744, 3378242; 356766, 3378244; 356788, 3378246; 356810,  
3378246; 356832, 3378246; 356855, 3378244; 356877, 3378242; 356899, 3378240;  
356920, 3378236; 356942, 3378232; 356964, 3378227; 356985, 3378221; 357006,  
3378214; 357027, 3378207; 357048, 3378199; 357068, 3378190; 357088, 3378180;  
357108, 3378170; 357127, 3378159; 357146, 3378147; 357164, 3378135; 357182,  
3378122; 357200, 3378109; 357217, 3378094; 357233, 3378080; 357249, 3378064;  
357265, 3378048; 357280, 3378032; 357294, 3378015; 357307, 3377997; 357320,  
3377979; 357333, 3377961; 357344, 3377942; 357355, 3377923; 357366, 3377903;  
357375, 3377883; 357384, 3377863; 357392, 3377842; 357399, 3377821; 357406,  
3377800; 357412, 3377779; 357417, 3377757; 357421, 3377735; 357425, 3377713;  
357428, 3377691; 357430, 3377669; 357431, 3377647; 357431, 3377625; 357431,  
3377603; 357430, 3377581; 357428, 3377559; 357425, 3377537; 357421, 3377515;  
357417, 3377493; 357412, 3377471; 357406, 3377450; 357399, 3377429; 357392,  
3377408; 357384, 3377387; 357375, 3377367; 357366, 3377347; 357355, 3377327;  
357344, 3377308; 357333, 3377289; 357320, 3377271; 357307, 3377253; 357294,  
3377235; 357280, 3377218; 357265, 3377202; 357249, 3377186; 357233, 3377171;  
357217, 3377156; 357200, 3377142; 357182, 3377128; 357164, 3377115; 357146,  
3377103; 357127, 3377091; 357108, 3377080; 357088, 3377070; 357068, 3377060;  
357048, 3377051; 357027, 3377043; 357006, 3377036; 356985, 3377029; 356964,  
3377023; 356942, 3377018; 356920, 3377014; 356899, 3377010; 356877, 3377008;  
356855, 3377006; 356832, 3377004.

(ii) **Note:** Map of Unit 7 follows:

Critical Habitat for the Dusky Gopher Frog  
Unit 7, Jackson County, Mississippi



(13) Unit 8: Forrest County, Mississippi.

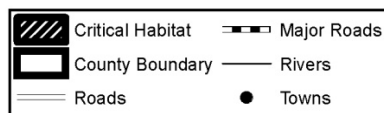
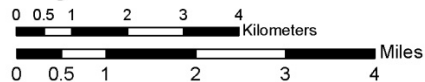
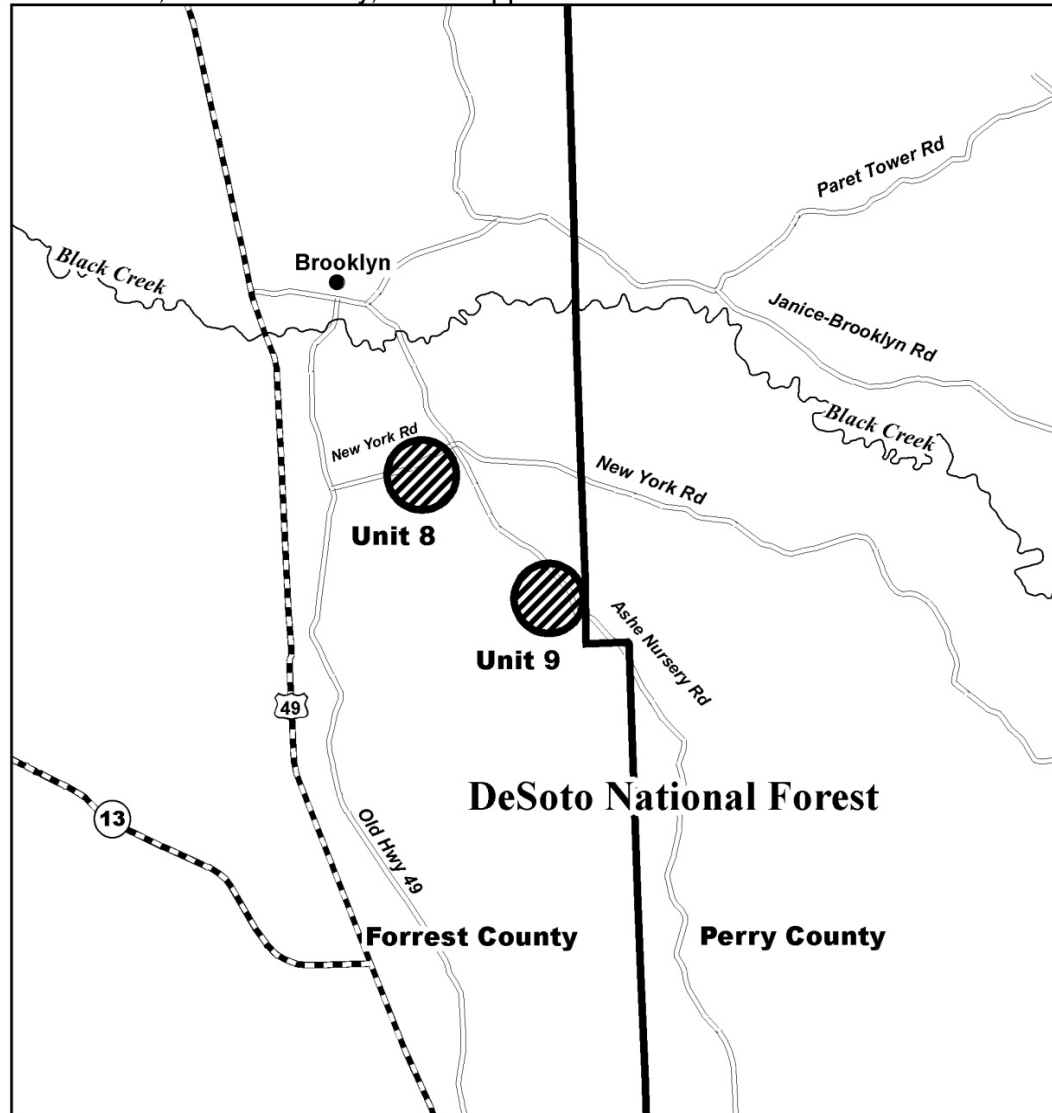
(i) From USGS 1:24,000 scale quadrangle map Brooklyn, Mississippi. Land bounded by the following UTM Zone 16N, NAD 83 coordinates, (E, N): 292305, 3434903; 292328, 3434158; 292305, 3434157; 292283, 3434158; 292261, 3434159; 292239, 3434161; 292217, 3434164; 292195, 3434167; 292173, 3434172; 292152, 3434177; 292130, 3434183; 292109, 3434189; 292088, 3434197; 292068, 3434205; 292047, 3434214; 292027, 3434223; 292008, 3434233; 291989, 3434244; 291970, 3434256; 291951, 3434268; 291933, 3434281; 291916, 3434295; 291899, 3434309; 291882, 3434324; 291866, 3434339; 291851, 3434355; 291836, 3434372; 291822, 3434389; 291808, 3434406; 291795, 3434424; 291783, 3434443; 291771, 3434462; 291760, 3434481; 291750, 3434501; 291741, 3434521; 291732, 3434541; 291724, 3434561; 291716, 3434582; 291710, 3434604; 291704, 3434625; 291699, 3434646; 291694, 3434668; 291691, 3434690; 291688, 3434712; 291686, 3434734; 291685, 3434756; 291684, 3434778; 291685, 3434801; 291686, 3434823; 291688, 3434845; 291691, 3434867; 291694, 3434889; 291699, 3434910; 291704, 3434932; 291710, 3434953; 291716, 3434975; 291724, 3434996; 291732, 3435016; 291741, 3435036; 291750, 3435056; 291760, 3435076; 291771, 3435095; 291783, 3435114; 291795, 3435133; 291808, 3435151; 291822, 3435168; 291836, 3435185; 291851, 3435202; 291866, 3435218; 291882, 3435233; 291899, 3435248; 291916, 3435262; 291919, 3435265; 291922, 3435267; 291933, 3435276; 291951, 3435289; 291970, 3435301; 291989, 3435313; 292008, 3435324; 292027, 3435334; 292047, 3435343; 292068, 3435352; 292088, 3435360; 292109, 3435368; 292130, 3435374; 292152, 3435380; 292173, 3435385; 292195, 3435390; 292217, 3435393; 292239, 3435396; 292261,



3435398; 292283, 3435399; 292305, 3435399; 292328, 3435399; 292350, 3435398;  
292372, 3435396; 292394, 3435393; 292416, 3435390; 292437, 3435385; 292459,  
3435380; 292480, 3435374; 292502, 3435368; 292522, 3435360; 292543, 3435352;  
292563, 3435343; 292583, 3435334; 292603, 3435324; 292622, 3435313; 292641,  
3435301; 292660, 3435289; 292678, 3435276; 292695, 3435262; 292712, 3435248;  
292729, 3435233; 292745, 3435218; 292760, 3435202; 292775, 3435185; 292789,  
3435168; 292803, 3435151; 292816, 3435133; 292828, 3435114; 292839, 3435095;  
292850, 3435076; 292861, 3435056; 292870, 3435036; 292879, 3435016; 292887,  
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292920, 3434690; 292917, 3434668; 292912, 3434646; 292907, 3434625; 292901,  
3434604; 292895, 3434582; 292887, 3434561; 292879, 3434541; 292870, 3434521;  
292861, 3434501; 292850, 3434481; 292839, 3434462; 292828, 3434443; 292816,  
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292745, 3434339; 292729, 3434324; 292712, 3434309; 292695, 3434295; 292678,  
3434281; 292660, 3434268; 292641, 3434256; 292622, 3434244; 292603, 3434233;  
292583, 3434223; 292563, 3434214; 292543, 3434205; 292522, 3434197; 292502,  
3434189; 292480, 3434183; 292459, 3434177; 292437, 3434172; 292416, 3434167;  
292394, 3434164; 292372, 3434161; 292350, 3434159; 292328, 3434158.

(ii) **Note:** Map of Units 8 and 9 follows:

Critical Habitat for the Dusky Gopher Frog  
Units 8 & 9, Forrest County, Mississippi



(14) Unit 9: Forrest County, Mississippi.

(i) From USGS 1:24,000 scale quadrangle map Brooklyn, Mississippi. Land bounded by the following UTM Zone 16N, NAD 83 coordinates, (E, N): 294462, 3432341; 294484, 3431844; 294462, 3431844; 294439, 3431844; 294417, 3431845; 294395, 3431847; 294373, 3431850; 294351, 3431854; 294330, 3431858; 294308, 3431863; 294287, 3431869; 294266, 3431876; 294245, 3431883; 294224, 3431891; 294204, 3431900; 294184, 3431909; 294164, 3431920; 294145, 3431931; 294126, 3431942; 294107, 3431955; 294089, 3431968; 294072, 3431981; 294055, 3431995; 294038, 3432010; 294023, 3432026; 294007, 3432042; 293992, 3432058; 293978, 3432075; 293964, 3432093; 293952, 3432111; 293939, 3432129; 293928, 3432148; 293917, 3432167; 293906, 3432187; 293897, 3432207; 293888, 3432227; 293880, 3432248; 293872, 3432269; 293866, 3432290; 293860, 3432311; 293855, 3432333; 293850, 3432355; 293847, 3432376; 293844, 3432398; 293842, 3432420; 293841, 3432443; 293841, 3432465; 293841, 3432487; 293842, 3432509; 293844, 3432531; 293847, 3432553; 293850, 3432575; 293855, 3432597; 293860, 3432618; 293866, 3432640; 293872, 3432661; 293880, 3432682; 293888, 3432702; 293897, 3432723; 293906, 3432743; 293917, 3432762; 293928, 3432782; 293939, 3432801; 293952, 3432819; 293964, 3432837; 293978, 3432854; 293992, 3432871; 294007, 3432888; 294023, 3432904; 294038, 3432919; 294055, 3432934; 294072, 3432948; 294089, 3432962; 294107, 3432975; 294126, 3432987; 294145, 3432999; 294164, 3433010; 294184, 3433020; 294204, 3433030; 294224, 3433039; 294245, 3433047; 294266, 3433054; 294287, 3433061; 294308, 3433066; 294330, 3433072; 294351, 3433076; 294373, 3433079; 294395, 3433082; 294417, 3433084; 294439, 3433085; 294462,

3433086; 294484, 3433085; 294506, 3433084; 294528, 3433082; 294550, 3433079;  
294572, 3433076; 294594, 3433072; 294615, 3433066; 294637, 3433061; 294658,  
3433054; 294679, 3433047; 294699, 3433039; 294720, 3433030; 294740, 3433020;  
294759, 3433010; 294779, 3432999; 294797, 3432987; 294816, 3432975; 294834,  
3432962; 294851, 3432948; 294868, 3432934; 294885, 3432919; 294901, 3432904;  
294916, 3432888; 294931, 3432871; 294945, 3432854; 294959, 3432837; 294972,  
3432819; 294984, 3432801; 294996, 3432782; 295007, 3432762; 295017, 3432743;  
295027, 3432723; 295035, 3432702; 295043, 3432682; 295051, 3432661; 295057,  
3432640; 295063, 3432618; 295068, 3432597; 295073, 3432575; 295076, 3432553;  
295079, 3432531; 295081, 3432509; 295082, 3432487; 295083, 3432465; 295082,  
3432443; 295081, 3432420; 295079, 3432398; 295076, 3432376; 295073, 3432355;  
295068, 3432333; 295063, 3432311; 295057, 3432290; 295051, 3432269; 295043,  
3432248; 295035, 3432227; 295027, 3432207; 295017, 3432187; 295007, 3432167;  
294996, 3432148; 294984, 3432129; 294972, 3432111; 294959, 3432093; 294945,  
3432075; 294931, 3432058; 294916, 3432042; 294901, 3432026; 294885, 3432010;  
294874, 3432000; 294868, 3431995; 294851, 3431981; 294834, 3431968; 294816,  
3431955; 294797, 3431942; 294779, 3431931; 294759, 3431920; 294740, 3431909;  
294720, 3431900; 294699, 3431891; 294682, 3431884; 294679, 3431883; 294658,  
3431876; 294637, 3431869; 294615, 3431863; 294594, 3431858; 294572, 3431854;  
294550, 3431850; 294528, 3431847; 294506, 3431845; 294484, 3431844.

(ii) **Note:** Map of Unit 9 is provided at paragraph (13)(ii) of this entry.

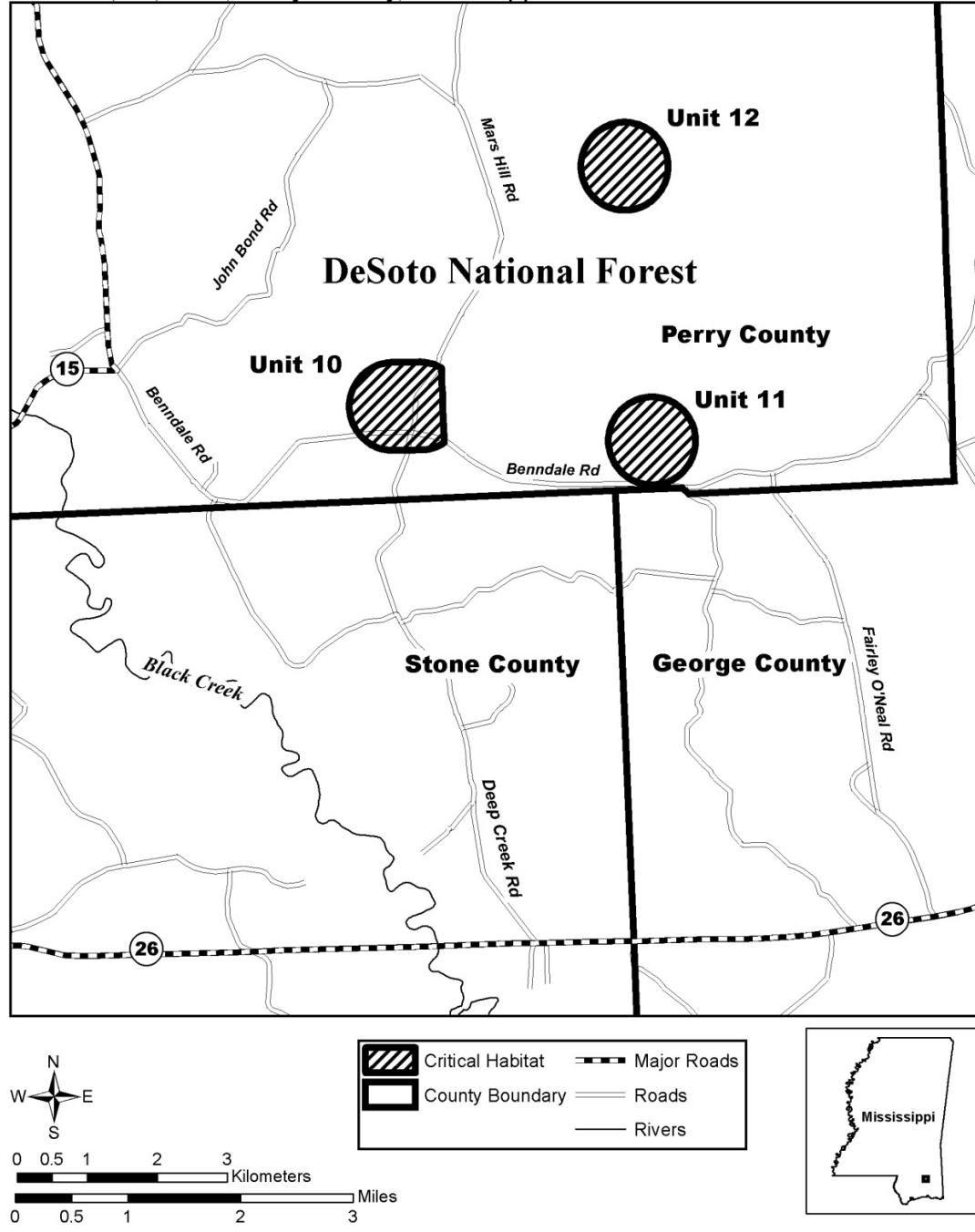
(15) Unit 10: Perry County, Mississippi.

(i) From USGS 1:24,000 scale quadrangle map Barbara, Mississippi. Land bounded by the following UTM Zone 16N, NAD 83 coordinates, (E, N): 316810, 3422707; 317164, 3421954; 317142, 3421953; 317119, 3421954; 317063, 3421956; 316926, 3421961; 316925, 3421961; 316735, 3421968; 316713, 3421970; 316691, 3421972; 316669, 3421974; 316662, 3421976; 316647, 3421978; 316626, 3421982; 316604, 3421987; 316583, 3421993; 316561, 3422000; 316541, 3422007; 316520, 3422015; 316500, 3422024; 316480, 3422034; 316460, 3422044; 316441, 3422055; 316422, 3422067; 316403, 3422079; 316385, 3422092; 316368, 3422106; 316351, 3422120; 316334, 3422135; 316318, 3422150; 316303, 3422166; 316288, 3422182; 316274, 3422199; 316260, 3422217; 316247, 3422235; 316235, 3422253; 316223, 3422272; 316212, 3422291; 316202, 3422311; 316193, 3422331; 316184, 3422351; 316176, 3422372; 316168, 3422393; 316162, 3422414; 316156, 3422436; 316151, 3422457; 316146, 3422479; 316143, 3422501; 316140, 3422523; 316138, 3422545; 316137, 3422567; 316137, 3422589; 316137, 3422611; 316138, 3422633; 316140, 3422655; 316143, 3422677; 316146, 3422699; 316151, 3422721; 316156, 3422743; 316162, 3422764; 316168, 3422785; 316176, 3422806; 316184, 3422827; 316193, 3422847; 316202, 3422867; 316212, 3422887; 316223, 3422906; 316235, 3422925; 316247, 3422943; 316260, 3422961; 316274, 3422979; 316288, 3422996; 316303, 3423012; 316318, 3423028; 316334, 3423044; 316351, 3423058; 316368, 3423073; 316385, 3423086; 316403, 3423099; 316422, 3423112; 316441, 3423123; 316460, 3423134; 316480, 3423144; 316500, 3423154; 316520, 3423163; 316541, 3423171;

316561, 3423178; 316583, 3423185; 316604, 3423191; 316626, 3423196; 316647,  
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316758, 3423210; 316780, 3423210; 316802, 3423209; 316804, 3423208; 317147,  
3423195; 317164, 3423195; 317186, 3423194; 317208, 3423192; 317230, 3423189;  
317252, 3423186; 317274, 3423181; 317295, 3423176; 317317, 3423170; 317338,  
3423164; 317359, 3423156; 317379, 3423148; 317400, 3423139; 317420, 3423130;  
317439, 3423119; 317458, 3423108; 317476, 3423097; 317474, 3422836; 317472,  
3422760; 317466, 3422451; 317463, 3422043; 317458, 3422040; 317439, 3422029;  
317420, 3422019; 317400, 3422010; 317379, 3422001; 317359, 3421993; 317338,  
3421985; 317317, 3421979; 317295, 3421973; 317274, 3421968; 317252, 3421963;  
317230, 3421960; 317208, 3421957; 317186, 3421955; 317164, 3421954.

(ii) **Note:** Map of Units 10, 11, and 12 follows:

Critical Habitat for the Dusky Gopher Frog  
Units 10, 11, & 12, Perry County, Mississippi



(16) Unit 11: Perry County, Mississippi.

(i) From USGS 1:24,000 scale quadrangle maps Barbara and Avent, Mississippi.

Land bounded by the following UTM Zone 16N, NAD 83 coordinates, (E, N): 320420, 3421781; 320442, 3421285; 320420, 3421284; 320398, 3421285; 320376, 3421286; 320354, 3421288; 320332, 3421291; 320310, 3421294; 320288, 3421298; 320267, 3421303; 320245, 3421309; 320224, 3421316; 320203, 3421323; 320182, 3421331; 320162, 3421340; 320142, 3421350; 320122, 3421360; 320103, 3421371; 320084, 3421383; 320066, 3421395; 320048, 3421408; 320030, 3421422; 320013, 3421436; 319997, 3421451; 319981, 3421466; 319966, 3421482; 319951, 3421499; 319937, 3421516; 319923, 3421533; 319910, 3421551; 319898, 3421569; 319886, 3421588; 319875, 3421607; 319875, 3421608; 319865, 3421627; 319855, 3421647; 319846, 3421668; 319838, 3421688; 319831, 3421709; 319824, 3421730; 319818, 3421752; 319813, 3421773; 319809, 3421795; 319805, 3421817; 319803, 3421839; 319801, 3421861; 319800, 3421883; 319799, 3421905; 319800, 3421927; 319801, 3421950; 319803, 3421972; 319805, 3421994; 319808, 3422007; 319809, 3422015; 319813, 3422037; 319818, 3422059; 319824, 3422080; 319831, 3422101; 319838, 3422122; 319846, 3422143; 319855, 3422163; 319865, 3422183; 319875, 3422203; 319886, 3422222; 319898, 3422241; 319910, 3422259; 319923, 3422277; 319937, 3422295; 319951, 3422312; 319966, 3422328; 319981, 3422344; 319997, 3422360; 320013, 3422375; 320030, 3422389; 320048, 3422402; 320066, 3422415; 320084, 3422428; 320103, 3422439; 320122, 3422450; 320142, 3422461; 320162, 3422470; 320182, 3422479; 320203, 3422487; 320224, 3422494; 320245, 3422501; 320267, 3422507;



320288, 3422512; 320310, 3422516; 320332, 3422520; 320354, 3422523; 320376,  
3422525; 320398, 3422526; 320420, 3422526; 320442, 3422526; 320464, 3422525;  
320486, 3422523; 320508, 3422520; 320530, 3422516; 320552, 3422512; 320574,  
3422507; 320595, 3422501; 320616, 3422494; 320637, 3422487; 320658, 3422479;  
320678, 3422470; 320698, 3422461; 320718, 3422450; 320737, 3422439; 320756,  
3422428; 320774, 3422415; 320792, 3422402; 320810, 3422389; 320827, 3422375;  
320843, 3422360; 320859, 3422344; 320875, 3422328; 320889, 3422312; 320904,  
3422295; 320917, 3422277; 320930, 3422259; 320943, 3422241; 320954, 3422222;  
320965, 3422203; 320975, 3422183; 320985, 3422163; 320994, 3422143; 321002,  
3422122; 321009, 3422101; 321016, 3422080; 321022, 3422059; 321027, 3422037;  
321031, 3422015; 321035, 3421994; 321038, 3421972; 321040, 3421950; 321041,  
3421927; 321041, 3421905; 321041, 3421883; 321040, 3421861; 321038, 3421839;  
321035, 3421817; 321031, 3421795; 321027, 3421773; 321022, 3421752; 321016,  
3421730; 321009, 3421709; 321002, 3421688; 320994, 3421668; 320985, 3421647;  
320975, 3421627; 320965, 3421608; 320954, 3421588; 320943, 3421569; 320930,  
3421551; 320917, 3421533; 320904, 3421516; 320889, 3421499; 320875, 3421482;  
320859, 3421466; 320843, 3421451; 320827, 3421436; 320810, 3421422; 320792,  
3421408; 320774, 3421395; 320756, 3421383; 320737, 3421371; 320718, 3421360;  
320698, 3421350; 320678, 3421340; 320658, 3421331; 320637, 3421323; 320616,  
3421316; 320595, 3421309; 320574, 3421303; 320552, 3421298; 320530, 3421294;  
320508, 3421291; 320486, 3421288; 320464, 3421286; 320442, 3421285.

(ii) **Note:** Map of Unit 11 is provided at paragraph (15)(ii) of this entry.

(17) Unit 12: Perry County, Mississippi.

(i) From USGS 1:24,000 scale quadrangle map Barbara, Mississippi. Land bounded by the following UTM Zone 16N, NAD 83 coordinates, (E, N): 320239, 3425675; 320261, 3425178; 320239, 3425178; 320216, 3425178; 320194, 3425180; 320172, 3425182; 320150, 3425184; 320128, 3425188; 320107, 3425192; 320085, 3425197; 320064, 3425203; 320042, 3425210; 320021, 3425217; 320001, 3425225; 319981, 3425234; 319961, 3425244; 319941, 3425254; 319922, 3425265; 319903, 3425277; 319884, 3425289; 319866, 3425302; 319849, 3425315; 319832, 3425330; 319815, 3425344; 319799, 3425360; 319784, 3425376; 319769, 3425392; 319755, 3425409; 319741, 3425427; 319728, 3425445; 319716, 3425463; 319704, 3425482; 319693, 3425501; 319683, 3425521; 319674, 3425541; 319665, 3425561; 319657, 3425582; 319649, 3425603; 319643, 3425624; 319637, 3425645; 319632, 3425667; 319627, 3425689; 319624, 3425711; 319621, 3425733; 319619, 3425755; 319618, 3425777; 319618, 3425799; 319618, 3425821; 319619, 3425843; 319621, 3425865; 319624, 3425887; 319627, 3425909; 319632, 3425931; 319637, 3425953; 319643, 3425974; 319649, 3425995; 319656, 3426015; 319657, 3426016; 319665, 3426037; 319674, 3426057; 319683, 3426077; 319693, 3426097; 319704, 3426116; 319716, 3426135; 319728, 3426153; 319741, 3426171; 319755, 3426189; 319769, 3426206; 319784, 3426222; 319799, 3426238; 319815, 3426254; 319832, 3426268; 319849, 3426283. 319866, 3426296; 319884, 3426309; 319903, 3426321; 319922, 3426333; 319941, 3426344; 319952, 3426350; 319961, 3426354; 319981, 3426364; 320001, 3426373; 320021, 3426381; 320042, 3426388; 320064, 3426395; 320085, 3426401;

320107, 3426406; 320128, 3426410; 320150, 3426414; 320172, 3426416; 320194, 3426418; 320216, 3426420; 320239, 3426420; 320261, 3426420; 320283, 3426418; 320305, 3426416; 320327, 3426414; 320349, 3426410; 320371, 3426406; 320392, 3426401; 320413, 3426395; 320435, 3426388; 320456, 3426381; 320476, 3426373; 320496, 3426364; 320516, 3426354; 320536, 3426344; 320555, 3426333; 320574, 3426321; 320593, 3426309; 320611, 3426296; 320628, 3426283; 320645, 3426268; 320662, 3426254; 320678, 3426238; 320693, 3426222; 320708, 3426206; 320722, 3426189; 320736, 3426171; 320749, 3426153; 320761, 3426135; 320773, 3426116; 320784, 3426097; 320794, 3426077; 320803, 3426057; 320812, 3426037; 320820, 3426016; 320828, 3425995; 320834, 3425974; 320840, 3425953; 320845, 3425931; 320850, 3425909; 320853, 3425887; 320856, 3425865; 320858, 3425843; 320859, 3425821; 320860, 3425799; 320859, 3425777; 320858, 3425755; 320856, 3425733; 320853, 3425711; 320850, 3425689; 320845, 3425667; 320840, 3425645; 320834, 3425624; 320828, 3425603; 320820, 3425582; 320812, 3425561; 320803, 3425541; 320794, 3425521; 320784, 3425501; 320773, 3425482; 320761, 3425463; 320749, 3425445; 320736, 3425427; 320722, 3425409; 320708, 3425392; 320693, 3425376; 320678, 3425360; 320662, 3425344; 320645, 3425330; 320628, 3425315; 320611, 3425302; 320593, 3425289; 320574, 3425277; 320555, 3425265; 320536, 3425254; 320516, 3425244; 320496, 3425234; 320476, 3425225; 320456, 3425217; 320435, 3425210; 320413, 3425203; 320392, 3425197; 320371, 3425192; 320349, 3425188; 320327, 3425184; 320305, 3425182; 320283, 3425180; 320261, 3425178.

(ii) **Note:** Map of Unit 12 is provided at paragraph (15)(ii) of this entry.

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Dated: May 29, 2012

/s/ Rachel Jacobson

*Acting Assistant Secretary for Fish and Wildlife and Parks*

Billing Code 4310-55-P

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